

INTEGRATED APPROACH FOR FALL PREVENTION IN ELDERLY

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Summary

Background

Falls among elderly are a major health problem that can have serious health, social and financial consequences. Approximately one third of the population aged over 65 years falls at least once a year. Especially in the Netherlands fall prevention is important, because the Dutch government stimulates elderly to live longer independent at home. In order to detect elderly with risk of falling and to prevent them from falling, an integrated approach between different health care professionals should be adopted in order to detect, refer and provide elderly with risk of falling with fall prevention interventions. However, research is lacking on how an integrated approach for fall prevention can be organized. Therefore, the aim of this research is to give policy recommendations to the GGD Hollands Midden and municipalities concerning an integrated approach for fall prevention in elderly. The main research question is: What are barriers and facilitators for establishing an integrated approach for fall prevention in Hollands Midden?

Methodology

Face-to-face semi-structured interviews were conducted with 16 stakeholders from municipalities Leiden and Katwijk. Domestic helpers, employees of home care organizations, district nurses, physiotherapists, general practitioner, representatives of welfare organizations, policy officers of Leiden and Katwijk and a representative of a health insurance company were included in this research. Participants were shown an integrated approach for fall prevention that included signalling and screening for fall risks in elderly by community organizations and primary care, referral to other health care professionals and eventually referral to fall prevention interventions. During the interviews, participants were asked what barriers and facilitators they experience regarding funding, administration, organization, service delivery and the clinical side in an integrated approach for fall prevention. Data was analysed with Atlas ti based on the concepts of the conceptual framework.

Results

Most stakeholders did not experience financial barriers for themselves in an integrated approach for fall prevention. Only a small number of participants experienced not being paid for the time consulting with others is considered a barrier. Most participants mentioned that finances will especially pose a problem for elderly when they have to purchase aids to prevent falling and when they are referred to a physiotherapist or fall prevention interventions. Participants mentioned that funding is needed for the reimbursement of aids, physiotherapy, fall prevention interventions and for meetings with other health care professionals in an integrated approach.

Administrative barriers that were mentioned were having no insight into the patient files of other stakeholders and insufficient information transfer regarding a patient between stakeholders. Also, time pressure and therefore not enough time to report elaborately concerning a patient is a barrier for

administration. Most respondents advocated for a universal ICT system were relevant information about a patient is shared among stakeholders in order to have insight in each other's files and to improve communication and care.

The interviews showed that major barriers that were experienced regarding organization were not knowing who to contact or to who elderly should be referred and not getting a hold of other professionals. For good collaboration and referral, it is important to know each other personally and know which partners are involved and what their role is in the integrated approach.

The results of this study showed that not all stakeholders are trained properly to signal falls risks in elderly and to engage in an integrated approach for fall prevention. Domestic helpers and employees of home care organizations need more training and time to sufficiently take on a role in an integrated approach. Furthermore, almost all stakeholders are unaware of the offer for fall prevention and therefore do not refer to fall prevention interventions. It is important that more information is provided about fall risks and fall prevention interventions among stakeholders.

Clinical barriers and facilitators were not mentioned often by the participants. Barriers that were mentioned were not being aware of the risk factors that cause falling in elderly and that not enough information about a patient is provided on the referral to health care professionals.

Conclusion

An integrated approach for fall prevention is extremely important to reduce the number of falls in elderly. This research shows that considerably more work needs to be done in order to establish an integrated approach for fall prevention in Hollands Midden. For an integrated approach for fall prevention it is important that stakeholders know each other, know their role, are aware of the role others, are trained properly to signal and screen falls risks and have enough time to act in an integrated approach. Furthermore, for an efficient integrated approach stakeholders should have access to or report in each other's patient files in order to be up to date and to facilitate communication. More research is needed regarding the perspectives of other relevant stakeholders on an integrated approach for fall prevention.

Abbreviations

CBS = Central Bureau for Statistics

CGL = Centre for Healthy Living

GGD HM = Public Health Service Hollands Midden

MDPH = Massachusetts Department of Public Health

PWTF = Prevention and Wellness Trust Fund

RIVM = National Institute for Public Health and the Environment

WHO = World Health Organization

WMO = Social Support Act

WLZ = Long-Term Care Act

ZVW = Health Insurance Act

1. Introduction

Falls among elderly pose a significant problem in health care and are a common cause of morbidity, mortality and increased medical costs (Das & Joseph, 2005; Nurmi & Lüthje, 2002; Stevens, Corso, Finkelstein, & Miller, 2006; Terroso, Rosa, Torres Marques, & Simoes, 2014). Research has shown that approximately one third of the population aged over 65 years will fall at least once a year and ten to twenty percent of these falls results in serious injuries (Abrass, Resnick, Kane & Ouslander, 2009; Alexander, Rivara, & Wolf, 1992; Gillespie et al., 2012; Hausdorff, Rios, & Edelberg, 2001; Hornbrook et al., 1994; Lord, Sherrington, Menz & Close, 2007). Elderly are particular at risk for falls and fall related injuries as elderly have a higher prevalence of comorbidities, age-related physiological changes and delayed functional recovery (Ambrose, Paul, & Hausdorff, 2013; Peel, Kassulke, & McClure, 2002; Rubenstein, 2006). Because of these factors even a minor fall can lead to serious injuries for the elderly population (Rubenstein, 2006).

Falls in elderly can lead to minor injuries such as bruising, lacerations, abrasions, sprains and strains. However, falls can also have serious health consequences such as fractures and traumatic brain injuries (Ambrose et al., 2013; Gillespie et al., 2012; Peel et al., 2002; Terroso et al., 2014). Moreover, an important problem of falling in elderly is that almost half of the elderly that have fallen are not able to get back up, which can lead to dehydration, pneumonia, pressures sores and rhabdomyolysis (Fleming & Brayne, 2008). In addition, elderly that have experienced a fall will be afraid of falling again. Research has shown that approximately 40% of the elderly will restrict their daily activities due to fear, which can cause social isolation and depression (Ambrose et al., 2013).

Falls among elderly also create a significant financial burden on health care as the number of fall-related injuries is increasing and will lead to increasing use of health care services. In the Netherlands, research has shown that during the period of 2006-2015 the number of emergency room visits due to falls among people of 65+ has increased with 40 percent from 69.400 to 97.400 (Veiligheid NL, 2016). Also, the number of subsequent hospitalizations has increased during this time period with 63 percent. It is estimated that these percentages will continue to increase and by 2030 the number of emergency room visits will have increased with 49 percent and the number of subsequent hospitalizations with 54 percent (Veiligheid NL, 2016). These increasing numbers of emergency room visits and hospitalizations will consequently result in higher health care costs. Research indicated that in 2013 the direct medical costs of fall accidents among elderly were 780 million euros (Veiligheid NL, 2015). In 2015, these costs have been increasing up to 912 million euros, which means that the costs of a fall are approximately 8800 euros (Veiligheid NL, 2016).

In the Netherlands, the problem of falls among elderly is even more pressing, because of the ageing population and recent changes in health care for elderly. Since 2015, new reforms were introduced by

the Dutch government, which shifted their tasks to municipalities (Rijksoverheid, n.d.). Important in this reform is that elderly are stimulated to become more self-reliant and to live longer independently at home (Rijksoverheid, n.d.). These recent changes highlight the importance of fall prevention in order to ensure that community dwelling elderly are self-reliant and independent.

In the Netherlands, several evidence-based interventions have been developed in order to prevent falls among elderly. However, the development of these interventions alone is not enough. It is imperative that elderly are referred to and participate in fall prevention interventions to prevent falling. However, fall prevention is often neglected in clinical practice (Tinetti, Gordon, Sogolow, Lapin, & Bradley, 2006). Research of Wenger et al. (2003) indicated that most elderly in primary care are not asked about falls. This corresponds with the situation in the Netherlands where the general practitioner only is aware of 20% of the falls among elderly (Nederlandse Vereniging voor Klinische Geriatrie, 2004). Furthermore, another problem is that elderly are often reluctant towards fall prevention. Research has shown that elderly often estimate their health too positive and do not realize that they are at risk of falling (Hughes et al., 2008). In addition, elderly often do not recognize their vulnerability for falling, because they do not want to be considered old and frail (Hughes et al., 2008; Stevens, Noonan, & Rubenstein, 2009).

For these reasons, it is of great importance that elderly at risk of falling are detected by health care professionals and consequently are referred to fall prevention interventions. As elderly often suffer from co-morbidities, they are in contact with multiple health care professionals. Tinetti et al. (2006) showed that coordination and referral between health care professionals is essential for effective fall-risk evaluation and management. When it comes to falls in elderly, a multidisciplinary approach is needed. Providers across different settings have to be able to work together, such as physicians, physical therapists, home care nurses and occupational therapists (Tinetti et al., 2006; Veiligheid NL, 2013).

Because of the importance of preventing falls among elderly, fall prevention for community dwelling elderly should be organized. An integrated approach among health care professionals should be adopted in order to effectively detect, refer and provide those at risk for falling with fall prevention interventions. However, research is lacking regarding how an integrated approach for fall prevention can be established. It is important to know what barriers and facilitators are for an integrated approach in order to establish an integrated approach for fall prevention in the Netherlands.

1.1 Research aim and question

This research is commissioned by the GGD Hollands Midden. The aim of this study is to give policy recommendations to the GGD Hollands Midden and municipalities concerning an integrated approach

for fall prevention in elderly by assessing the perspectives of Dutch stakeholders regarding barriers and facilitators for an integrated approach for fall prevention. The main research question derived from the objective is: What are the barriers and facilitators for establishing an integrated approach for fall prevention in Hollands Midden?

2. Contextual background

This chapter will start by providing more information on the commissioner of this research the GGD Hollands Midden and the situation of falls among elderly in Hollands Midden. Furthermore, multiple health care reforms have been introduced recently in the Netherlands, which affects how health care for elderly is organized. Therefore, the current legislation of health care for elderly will be described. Moreover, this chapter will elaborate on the causes of falls and the available prevention interventions in the Netherlands. To conclude, all stakeholders involved with fall prevention in elderly will be described, which will be illustrated in a stakeholder's chart.

2.1 Public Health Service Hollands Midden (GGD HM)

The Public Health Service Hollands Midden (GGD HM) is an organization that aims to monitor, protect and promote the health and well-being of citizens in the region Hollands Midden (GGD Hollands Midden, 2017). The region Hollands Midden consists of approximately 750.000 people and can be divided into 2 sub-regions: Zuid-Holland Noord and Midden-Holland (GGD Hollands Midden, 2015). An overview of the municipalities in these sub-regions can be found in Appendix 1.

Every four years, all GGD's in the Netherlands distribute a health survey among citizens in their region to get insight in the health and lifestyle of Dutch citizens. This survey includes questions regarding personal characteristics, employment, income, living area, health, use of health care, lifestyle and domestic violence (GGD Gooi en Vechtstreek, n.d; GGD Hollands Midden, 2013). The 2016 health survey of GGD HM showed that 17,7% of the elderly in Hollands Midden have fallen at least once in the last three months. Of this percentage, 12% has fallen once and 5,7% has fallen twice or more. Furthermore, the survey indicated that the percentage of elderly that experience a fall increases with age. Of the elderly that are aged 65-74 14% falls, whereas 36% of the elderly that are aged 85 or older falls. The survey showed that 57% of the falls in elderly resulted in injuries, 24% had to be medically treated and 33% did not get medical treatment for their injuries. In Hollands Midden, 38% of the elderly have fallen at home, 18% has fallen around the house and 44% of the elderly fell elsewhere (GGD Hollands Midden, 2017).

2.2 Health care for elderly in the Netherlands

As mentioned in the introduction, health care in the Netherlands has changed in the last years. Due to these recent changes, fall prevention has become even more important, because the new reforms in health care may negatively affect falls in elderly. Therefore, this section will elaborate on how health care is organized for elderly in the Netherlands.

The last couple of years, health care has changed drastically in the Netherlands and multiple reforms were introduced. Since 2015, long term care for elderly is financed through the Social Support Act

2015 (WMO 2015), the Long-Term Care Act (WLZ) and the Health Insurance Act (ZVW) (Ministerie van Volksgezondheid, Welzijn en Sport, n.d.).

The aim of the WMO 2015 was to shift responsibilities to the municipalities as the idea is that municipalities are closer to citizens and therefore can offer more efficient and high quality care (Ministerie van Volksgezondheid, Welzijn en Sport, 2016; Rijksoverheid, n.d.). Important in this reform is the task of municipalities to ensure that elderly are stimulated to live longer independently at home and there is more emphasis on informal care (Rijksoverheid, n.d.; Rijksoverheid n.d.; Rijksoverheid, n.d.). In the WMO 2015, municipalities play a huge role in order to ensure that elderly can live longer independent at home by providing advice, information and support. When an elder cannot live independently at home, municipalities will investigate what kind of help is needed and to what extent informal care can contribute. When informal care cannot contribute, municipalities are legally required to provide social support under the WMO 2015 act. However, the law does not indicate which kind of services municipalities should provide (Rijksoverheid, n.d.; Rijksoverheid, n.d.; Rijksoverheid, n.d.). Municipalities can either provide standard or customized services. For some of these services a financial contribution is required. Examples of standard services are: shopping service, meal services and a meeting place for people that are lonely. Examples of customized services are: transport services, alterations to the home (e.g. a stair lift or elevated toilet) domestic help, customized day activity program and support for informal caregivers (Rijksoverheid, n.d.).

Elderly that need medical care or personal care at home cannot receive this trough the WMO 2015. This is arranged through the Health Insurance Act (ZVW) (Rijksoverheid, n.d.). This act ensures that every citizen of the Netherlands is insured for a basic health insurance package (Ministery of Health, Welfare and Sport, 2016). The ZVW provides medical care, but also personal care such as help with showering. In the Netherlands, a district nurse is assigned that determines what kind of care is needed and consequently a care plan is set up (Rijksoverheid, n.d.). When it comes specifically to fall prevention, the ZVW act does not reimburse all services and products. For instance, the basic health insurance package under the ZVW act does not reimburse walking aids such as walkers and crutches. This has to be bought or rent by the person itself (Rijksoverheid, n.d.). Furthermore, physiotherapy and fall prevention courses are not reimbursed from the basic health insurance package. A supplementary insurance package is needed for physiotherapy and to get full or partly reimbursement for fall prevention courses (Rijksoverheid, n.d.).

For elderly that need care or supervision 24 hours a day, the Long-Term Care Act (WLZ) has been introduced. Those elderly do not have to live independent at home but have the right to stay in a health care facility. The WLZ act involves intensive care for vulnerable elderly and disabled people

(Rijksoverheid, n.d.). However, the WLZ act is not applicable for this research, because this research involves community dwelling elderly.

2.3 Fall prevention in elderly

2.3.1 Risk factors for falls in elderly

As mentioned earlier, falls in elderly are a significant problem and can result in severe consequences. However, prevention of falls among elderly is not easy, because it is a multifactorial phenomenon and thus can have multiple causes. Falls are complex events and are a combination of intrinsic impairments and disabilities with or without accompanying environmental hazards (Kannus, Sievänen, Palvanen, Järvinen, & Parkkari, 2005). Research shows that there are several risk factors for falling: previous falls, decreased muscle strength, gait/balance impairment, visual impairment, polypharmacy (more than 4 medications) or psychoactive drugs, depression, dizziness or orthostasis, functional limitations, age older than 80 years, female sex, incontinence, cognitive impairment, arthritis, diabetes, pain and environmental hazards (Al-Aama, 2011; Kannus et al., 2005; Lee, Lee, & Khang, 2013). Research shows that the strongest risk factors for falls are previous falls, use of psychoactive medications, weakness and gait and balance impairments (Lee et al., 2013).

2.3.2 Identification of elderly with increased fall risk

In order to prevent falling, screening of community dwelling elderly is extremely important in order to identify those with increased risk of falling. In general, a quick screening can take place in any medical practice by asking elderly about their history of falls in the past year and gait or balance problems. When these risk factors are present, the risk of falling increases and a full assessment should be done (Al-Aama, 2011). In the Netherlands, a fall analysis tool called Valanalyse 65+ has been developed by Veiligheid NL in order to screen elderly. This tool has been developed for health professionals in primary care in order to identify elderly at risk for falling with a fall risk test, to analyse the fall risks and to provide a tailored advice (Appendix 2) (Veiligheid NL, n.d.; Loket Gezond Leven, n.d.). However, the Accreditation Commission Interventions (in Dutch: De Erkenningscommissie Interventies) showed that the Valanalyse 65+ is not known by many health care professionals and they indicated that this should be improved (Erkenningscommissie Interventies, n.d.).

Furthermore, in the Netherlands, two guidelines are available that can be used by health care professionals to identify elderly with fall risks, screen and prevent falls among elderly. The guideline "prevention of fall incidents in elderly" was developed by the Dutch Society for Clinical Geriatrics and is intended for all health care professionals that come into contact with patients that have an increased risk of falling (Nederlandse Vereniging voor Klinische Geriatrie, 2004). The second guideline that is available is "the occupational therapy guideline fall prevention" developed by the Dutch Association of Occupation Therapy. This guideline is developed for occupational therapists that

want to advise or guide clients with increased fall risk (Theune & Steultjens, 2005). Both guidelines include a flowchart on how to identify elderly with fall risks (Appendix 3).

2.3.3 Fall prevention interventions

Research has shown that several interventions for fall prevention are effective in reducing the fall risk and rate of falls in elderly (Al-Aama, 2011; Gillespie et al., 2012). Fall prevention interventions are divided into single and multicomponent interventions (Al-Aama, 2011). Interventions that have a multifactorial approach are most effective in reducing falls in elderly (Veiligheid NL, 2013). Literature shows that there are interventions that focus on vitamin D, exercise, strength and balance training, medications, vision and home environment (Al-Aama, 2011; Kannus et al., 2005).

In the Netherlands, several interventions have been developed in order to prevent falls among elderly. Effective interventions for fall prevention are registered in a database by the Centre for Healthy Living (CGL), which is part of the Dutch National Institute for Public Health and the Environment (RIVM). In total, nine interventions for fall prevention are registered in the database. Most of the fall prevention interventions focus on creating awareness for risk factors of falling, improving balance, mobility and self-confidence, stimulating physical activity and reducing the fear of falling (Loket Gezond Leven, n.d.).

2.4 Stakeholders in fall prevention

There are several stakeholders involved in the prevention of falls among elderly. As mentioned earlier, falls among elderly is a multifactorial problem and calls for a multidisciplinary approach for effective fall prevention. An integrated approach for fall prevention is essential for community dwelling elderly, because it is impossible for one discipline to address all risk factors for falling (Baxter & Markle-Reid, 2009). This means that several stakeholders should be working together in order to detect and refer elderly that are at risk of falling. In the Netherlands, these stakeholders are: health care professionals in primary care, home care organizations, district nurses, elderly consultants, welfare organizations, municipalities and health insurance companies. An overview is made to show the different roles of the stakeholders and their connection in an integrated approach for fall prevention (Figure 1). In the section below, the role of these stakeholders will be explained.

2.4.1 Health care professionals in primary care

Health care professionals in primary care are essential for providing an infrastructure that enables fall prevention. One of the most important stakeholders in the prevention of falls among elderly are general practitioners. In the Netherlands, they are considered gatekeepers and they have a pivotal role in detecting elderly at risk of falling. It is important that when they detect elderly at risk, they refer them to other health care professionals or organizations that can offer prevention interventions (Wijlhuizen, Chorus, Fleuren, du Bois & Hopman-Rock, 2006). Furthermore, physiotherapists are also

important as they can offer elderly exercise programs that are aimed at muscle strengthening in order to prevent falling (Wijlhuizen et al., 2006).

2.4.2 Home care organizations

Home care organizations are organizations that provide services at the homes of clients that need help or guidance. They provide several services such as personal care, nursing, guidance in daily life and domestic help (Rijksoverheid, n.d.). Within home care organizations, there are several professionals that play a role in fall prevention. Personal caregivers and domestic helpers play a role in detecting whether elderly have an increased risk of falling. Subsequently, they have to be referred to other professionals or organizations that can offer prevention programs (Wijlhuizen et al., 2006). Nurses of home care organizations also play a role in fall prevention. It is important that they gain more insight into risk factors of falling and give advice or refer them to the right professional (Wijlhuizen et al., 2006). Furthermore, when employees of home care organizations notice unsafe home situations, they can advise municipalities to make improvements in the home in order to ensure that falls are prevented (Loket Gezond Leven, 2016).

2.4.3 District nurse

In the Netherlands, districts nurses provide personal care and nursing care at home to people with chronic diseases, physical limitations and mental disorders (Rijksoverheid, n.d.). District nurses can help their clients with standing up, showering and with giving injections. In addition, district nurses can provide medical care. Besides these tasks, district nurses also have a signalling and coordinating function and make agreements with the municipalities regarding healthcare, welfare and housing (Rijksoverheid, 2010; Rijksoverheid, n.d.). Furthermore, district nurses discuss with their clients' what kind of care or nursing is needed and help to arrange that care. In the Netherlands, the care provided by district nurses is reimbursed from the mandatory basic health insurance (Rijksoverheid, n.d.). These district nurses often work for home care organizations and thus are closely involved in providing care at the home of elderly (Rijksoverheid, n.d.). This gives them a pivotal role in detecting elderly at risk of falling. It is important that they refer these elderly to other professionals or organizations that can offer fall prevention programs.

2.4.4 Elderly adviser

In the Netherlands, elderly advisers provide information and advice to elderly that are aged 55 years or older. Elderly advisers are often free of charge and provide information and advice regarding all problems due to ageing, such as physical limitations, loneliness and transportation. Furthermore, elderly advisors can help with the mediation between elderly and other organizations and they help to ensure that elderly can live independent at home as long as possible. (Rijksoverheid, n.d.). During their home visits to clients, elderly advisors play role in detecting increased risk of falling. Furthermore, they provide information about fall prevention and refer elderly that are at risk to other health care professionals (Wijlhuizen et al., 2006).

2.4.5 Welfare organizations

There is a close relationship between municipalities and welfare organizations when it comes to fall prevention. Municipalities can describe focal points for fall prevention on which welfare organizations should focus. In turn, welfare organizations can organize and promote fall preventions activities which are in line with the policy of municipalities. Furthermore, municipalities can stimulate welfare organizations to focus more on exercise programs that target fall prevention (Loket Gezond Leven, 2016).

2.4.6 Elderly day care

In the Netherlands, day care for elderly is offered in health care facilities. Elderly that live at home can go to a health care facility during the day to receive care and to participate in their activities. Day care involves care guidance in groups and nursing care, such as help with taking medicines and going to the toilet (Rijksoverheid, n.d.). These employees are closely involved with elderly during the day and thus are important in signalling whether elderly have an increased risk of falling. In order to prevent falling, it is important that these employees refer elderly to other professionals or to prevention interventions.

2.4.7 Municipalities

Municipalities are responsible for monitoring, promoting and stimulating the use of interventions for fall prevention. Furthermore, municipalities can facilitate regional meetings regarding fall prevention. These meetings contribute to an improved coordination and connection of organizations that focus on prevention (Loket Gezond Leven, 2016).

2.4.8 Health insurance companies

It is important that health insurance companies are also considered in an integrated care approach for elderly, because agreements can be made regarding the coverage of fall prevention activities for elderly (Loket Gezond Leven, 2016).

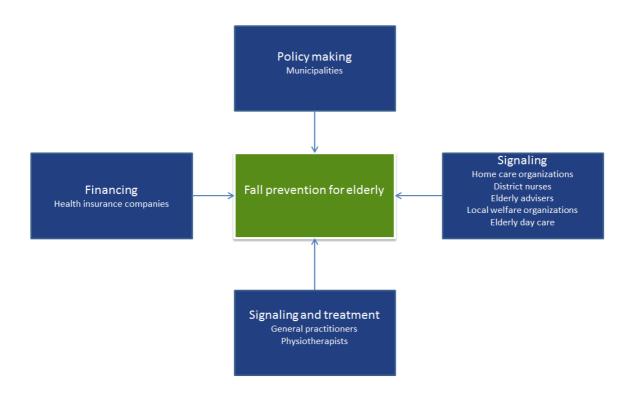


Figure 1. Overview of stakeholders involved with fall prevention in elderly

3. Theoretical background

As mentioned earlier, in order to ensure effective fall prevention an integrated approach among health care professionals should be adopted. This chapter will elaborate on the concept integrated care and on a model for an integrated approach for fall prevention. In addition, the conceptual framework of this research will be presented.

3.1 Integrated care

Integrated care is a term that has been emphasized the last years in order to create coherence and synergy between health care components in order to improve system efficiency, consumer satisfaction, quality of care and quality of life (Kodner, 2009). Integrated care has been especially mentioned for the frail elderly since 1990 (Kodner & Kyriacou, 2000). The concept integration can be defined as: "the act of making a whole out of parts; the co-ordination of different activities to ensure harmonious functioning" (Gröne & Garcia-Barbero, 2001). Most research refers to integration in terms of care. This study focusses on an integrated approach for fall prevention, but as prevention is also part of health care, from now on we will refer to integrated care.

Several definitions of integrated care can be found in literature. The World Health Organization (WHO) has defined integrated care as: "a concept bringing together inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation and health promotion. Integration is a means to improve services in relation to access, quality, user satisfaction and efficiency" (Gröne & Garcia-Barbero, 2001). On the other hand, Kodner & Kyriacou (2000) defined integrated care as: "a discrete set of techniques and organisational models designed to create connectivity, alignment and collaboration within and between the cure and care sectors at the funding, administrative and/or provider levels. The goals are to enhance quality of care and quality of life, consumer satisfaction, and system efficiency for patients with complex problems cutting across multiple sectors and providers." Leutz (1999) adopted a different definition of integration, namely as: "the search to connect the healthcare system (acute, primary medical and skilled) with other human service systems (e.g., long-term care, education and vocational and housing services) to improve outcomes (clinical, satisfaction and efficiency)" (Leutz, 1999). These definitions all have in common that they focus on connecting and bringing together different sectors, which is the main goal of this research. According to Leutz (1999), integration can occur at different levels such as the finance, clinical, management and policy level. Furthermore, there are several means for integration. Service delivery, screening and referral, care planning and monitoring and feedback are mentioned as means by Leutz. The definition of Leutz (1999) for integrated care will be used in this research. Different levels of integrated care will be explained below.

3.1.1 Levels of integration

In literature, different levels and types of integrated care can be found. According to Leutz (1999), integration consists of three levels: 1) linkage, 2) co-ordination and 3) full integration. These three levels represent a continuum of integration. The first level, linkage, is an approach for integration that calls for the least change. In this level, health care providers work together on an ad hoc basis in the existing and fragmented systems. In the second level, co-ordination, infrastructure and mechanisms are developed between sectors and systems in order to facilitate information sharing, collaboration and communication. The last level, full integration, entails the combination of responsibilities, resources and financing from various systems into a single system or organization.

Besides these three levels, Shortell, Gillies, & Anderson (1994) argue that integration can be divided in horizontal and vertical integration. Whereas horizontal integration refers to similar organizations at the same level that are brought together and vertical integration refers to the combination of different organizations at different levels (e.g. home care organizations and hospitals) (Shortell et al., 1994). In this research, we strive for integration at the co-ordination level as it is the aim to link different sectors and health care professionals. Furthermore, vertical integration is applicable to this study as different levels of health care need to be combined.

3.2 Integrated approach for fall prevention

This study focusses on establishing an integrated approach for fall prevention among elderly. First, it is important to operationalize what is meant with falls among elderly. The WHO has defined falls as: "an event which results in a person coming to rest inadvertently on the ground or floor or other lower level" (WHO, 2016). In this study, the age of 65 is considered as elderly, because in most developed countries the chronological age of 65 years or older is considered as an elder or older person (WHO, n.d.).

As mentioned in the introduction, an integrated approach for fall prevention should include the signalling of elderly at risk by different health care professionals. Consequently, elderly at risk should be referred to other health care professionals or organizations that can provide fall prevention interventions. The Prevention and Wellness Trust Fund (PWTF) has created a model for integrated fall prevention. The PWTF is a program that is regulated by the Massachusetts Department of Public Health (MDPH) and aims at reducing the rates of preventable health conditions (Coe et al., 2017). One of their focus points is to reduce the burden of falls among elderly. The model created by the PWTF for an integrated fall prevention consists of screening, clinical assessment and referral to community based prevention interventions (Figure 2).

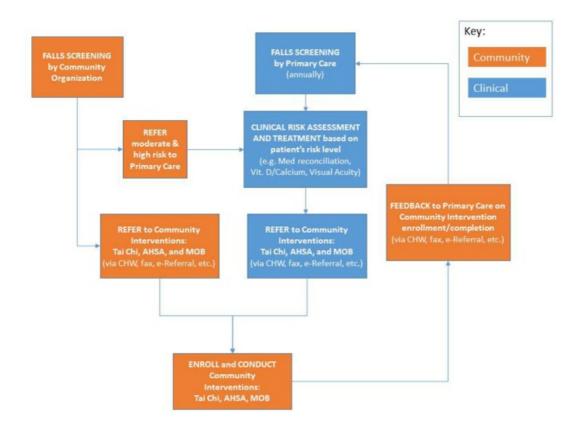


Figure 2. Integrated fall prevention workflow (Coe et al., 2017)

The PWTF model distinguishes fall screening by community organizations and primary care. Furthermore, this model shows that when elderly are screened by community organizations, elderly with moderate and high risk of falls are referred to primary care. Elderly with low risk are referred to community interventions and consequently have to participate in the interventions. When elderly with moderate or high risk are referred by community organizations to primary care, a clinical risk assessment and treatment based on the patient's risk level is conducted. Subsequently, these elderly are also referred and enrolled in community interventions. Lastly, feedback should be provided to primary care on the completion of these community interventions. The screening, clinical assessment and referral to community-based prevention interventions in the PWTF model are based on the CDC's "Stopping Elderly Accidents, Deaths and Injuries" (STEADI) toolkit and algorithm for screening, clinical assessment and referral, which can be found in Appendix 4 (Stevens, 2013).

3.2.1 Barriers for integrated care

Because this research focusses on barriers and facilitators for an integrated approach for fall prevention, it is important to explore literature on barriers that play a role in integrated care. Kodner & Spreeuwenberg (2002) argue that most of the barriers that are experienced for integrated care occur at the funding, administration, organization, service delivery and clinical level.

Funding often forms a barrier for integrated care as the division, structure and flow of funds for health and social care can affect integrated care. Furthermore, administration can also be a barrier for integrated care, because the way that government regulatory and administrative functions are structured and devolved is of influence on program complexities, streamline eligibility and access and management system resources. For barriers on an organizational level, Kodner & Spreeuwenberg (2002) argue that collaboration and joint working relationships within and between organizations facilitate efficiency and uninterrupted provision of care. Moreover, service delivery also plays a pivotal role in establishing integrated care. The way health care providers act on their responsibilities, work together and how they are trained have an influence on service access, availability and flexibility, continuity and co-ordination of care and consumer satisfaction. Lastly, clinical barriers refer to barriers as a result of no shared understanding of patients' needs, common professional language, the use of agreed upon practices and maintenance of patient provider communication (Kodner & Spreeuwenberg, 2002).

3.3 Conceptual framework

In this study, the integrated fall prevention model of PWTF is adopted. This model provides a great overview of an integrated approach for fall prevention and can also be used in the Dutch context. However, not all components of the PWTF model will be included in the conceptual framework of this study. The last steps in the model, enrollment and conduction of community interventions and the feedback loop regarding the completion of the interventions to primary care will not be included in this study. The choice is made to exclude these steps in order to narrow the scope of this research. Furthermore, signalling of elderly at risk by community organizations is added to this model. This is done, because the contextual background shows that in the Netherlands professionals of community organizations also play a role in signalling elderly at risk. After elderly are signalled, the step of screening by community organizations follows. Figure 3 shows the conceptual framework of this research.

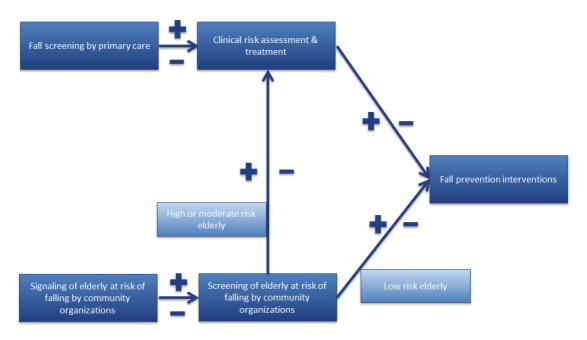


Figure 3. Conceptual framework: integrated approach for fall prevention among elderly

The conceptual model created in this research connects the components of the model of PWTF and the five aforementioned barriers of integrated care. In order for fall prevention to be effective, it is important that each step of the model is followed. However, during each step of this model barriers for integrated care may occur, which makes it pivotal to include this in the conceptual framework. In this conceptual model, the barriers and facilitators for each step are indicated with plusses and minus and refer to barriers and facilitators on funding, administration, organization, service delivery and clinical level.

In this research, screening is operationalized as screening for fall risk factors in elderly in order to determine whether they have an increased risk of falling. It is not sufficient to screen all elderly, therefore screening is only done when it is suspected by primary care or community organizations that elderly may have an increased risk of falling. Clinical risk assessment and treatment refers to an extensive assessment to find out the reasons for falling and subsequently a treatment by primary care. Lastly, fall prevention interventions refer to evidence based interventions of the database from CGL or exercise programs for elderly at welfare organizations.

Furthermore, in this conceptual framework barriers and facilitators for each step are included. Barriers and facilitators relating to funding are operationalized as how stakeholders experience financing in an integrated approach. Administrative barriers and facilitators refer to regulation and registration in fall prevention. Furthermore, organizational barriers and facilitators refer to collaboration and working relationships between stakeholders. Moreover, service delivery refers to the way stakeholders act on their responsibilities, work together and how they are trained. Lastly, clinical barriers refer to shared

understanding of patients' needs, common professional language, the use of agreed upon practices and maintenance of patient provider communication.

Based on the conceptual model, the following sub-questions are derived:

- What are barriers and facilitators concerning funding in an integrated approach for fall prevention?
- What are barriers and facilitators concerning administration in an integrated approach for fall prevention?
- What are barriers and facilitators concerning organization in an integrated approach for fall prevention?
- What are barriers and facilitators concerning service delivery in an integrated approach for fall prevention?
- What are barriers and facilitators concerning the clinical side in an integrated approach for fall prevention?

4. Methods

This chapter elaborates on the methods used in this study in order to conduct this research. The study design, setting and subjects will be discussed. Furthermore, the data collection and the data analysis will be explained in detail.

4.1 Study design

The aim of this study was to examine the perspectives of relevant stakeholders towards barriers and facilitators of an integrated approach for fall prevention to eventually be able to make recommendations to the GGD and municipalities in Hollands Midden on how an integrated approach for fall prevention can be established. In order to answer the main research question and the corresponding sub-questions, a qualitative research has been conducted in five months. The choice was made to conduct a qualitative research, because this type of research is focused on gathering the meanings and understanding of the views of the study objects (Jones, 1995). In contrast with quantitative research, qualitative research does not only provide a snapshot of events. It takes place in real life settings and tries to understand how and why things happen (Gray, 2014). Furthermore, qualitative research allows participants to be open and talk freely about certain topics, which is needed for this research (Gray, 2014). This study was explorative as the aim was to learn more about barriers and facilitators regarding an integrated approach for fall prevention according to several stakeholders that are involved in fall prevention. Furthermore, this research was a cross-sectional study, because the data was collected at one moment in time.

4.2 Setting and subjects

Sixteen semi-structured interviews were conducted with stakeholders in order to answer the research questions. In this study, different stakeholders that are involved with fall prevention were included in order to obtain a sufficient overview of the barriers and facilitators of an integrated approach for fall prevention. Stakeholders in primary care and in community organizations that signal and screen elderly with fall risks were included, which are: general practitioners, physiotherapists, domestic helpers, personal caregivers, district nurses, and welfare organizations. In addition, municipalities and health insurance companies also play a pivotal role in establishing an integrated approach for fall prevention, which has been explained in the contextual background. Therefore, these stakeholders also have been included.

Stakeholders were chosen from two municipalities in the region Hollands Midden. It was specifically chosen to include stakeholders from the municipalities Leiden and Katwijk, because they expressed their interest to the GGD HM concerning the improvement of fall prevention in their municipality. Contacts of the GGD HM were used to approach policy officers of the two municipalities and an employee of a health insurance company. The remaining stakeholders were searched for on the internet and approached by mail or phone. Beforehand, the aim was to include at least one type of

stakeholder per municipality in order to accomplish data saturation and in order to be representative of the municipalities. However, general practitioners were difficult to recruit due to lack of time and therefore only one general practitioner in Leiden was included. In the search for stakeholders, it was made sure that stakeholders from different neighborhoods in the municipalities were chosen in order to have a broader view.

4.3 Data collection

Data regarding barriers and facilitators for an integrated approach for fall prevention were collected by means of semi-structured interviews. Semi-structured interviews are non-standardized interviews, however, beforehand a list of topics that needs to be covered during the interviews are set (Gray, 2014). This topic list guides the interview, but the order of questions is not set and not all topics have to be discussed when they are not deemed relevant for the specific interview. Semi-structured interviews were chosen in this study, because they allow probing of views and opinions of the respondents, which can be used to gain more in depth and elaborate answers. Furthermore, according to Crabtree (2006), semi-structured interviews result in reliable and comparable data because the main topics are set.

A topic list (Table 1) and interview guide (Appendix 5) were developed before the semi-structured interviews were conducted. Three different interview guides were developed, because of the different involvement in fall prevention among stakeholders. This means that not all stakeholders can discuss each step of the conceptual framework. Therefore, one interview guide was created for stakeholders that signal and screen elderly (employees of home care and welfare organizations) and one interview guide for stakeholders that are involved in screening and clinical risk assessment and treatment (general practitioners and physiotherapist). Furthermore, an interview guide was created for the health insurance company and municipalities. These stakeholders do not signal, screen or treat elderly, but are involved in the organization and financing of an integrated approach for fall prevention. Therefore, the interviews with municipalities and the health insurance company were focused on gaining more insight in how an integrated approach for fall prevention can be facilitated.

The interviews consisted mainly of open questions. The main focus of the interviews was to gain insight in the perceptions of stakeholders towards barriers and facilitators that are experienced in the steps of the conceptual model. The barriers and facilitators that were focused on during the interviews were: funding, administration, organization, service delivery and the clinical side. In the interviews, participants were also asked about their perspectives regarding fall prevention, an integrated approach for fall prevention and what they currently do to prevent falling in elderly. All interviews were conducted face to face and permission was asked to record the interview in order to analyze the data. The interviews varied from 45 to 75 minutes.

Table 1. Topic list

- Views on fall prevention and an integrated approach for fall prevention
- What is currently being done to prevent falls?
- What happens when elderly with risk of falling are signalled?
- What happens when elderly are screened for fall risks?

Barriers and facilitators in an integrated approach for fall prevention:

- Funding
- Administration
- Organization
- Service delivery
- Clinical side

4.4 Data analysis

Each interview was recorded with an audio recorder and transcribed verbatim in order to be able to analyze the data. In order to ensure privacy, the transcripts were anonymized and each respondent was given a number. After the interviews had been transcribed, a summary was made in order to find emerging themes that could be of use in the following interviews. A thematic analysis based on the five concepts of the conceptual framework was carried out with Atlas.ti. First, the interview transcript were read and an initial start list of codes were developed that related to the five concepts. The second stage of the coding process consisted of reviewing the codes and looking for sub-codes that emerged from the data. These sub-codes were placed under the start list codes. Then, these codes and sub-codes were reviewed and codes that belonged together were classified as one code. Lastly, themes emerged from the data and all codes were classified into the different themes of the conceptual framework.

4.5 Internal validity

The internal validity of this study has been increased by recording and transcribing the interviews. Furthermore, each participant was sent a summary of the interview in order to check whether the interviews reflected their opinions. In addition, they could make additions or changes, which ensured that the interview data was complete and accurate.

4.6 Ethical consideration

For this study ethical approval by the Medical Ethical Committee is not required.

5. Results

This chapter presents the findings of this study regarding an integrated approach for fall prevention. The aim of this study was to assess the perspectives of Dutch stakeholders regarding barriers and facilitators for establishing an integrated approach for fall prevention. In total, 16 stakeholders were interviewed which were asked about financial, administrative, organizational, service delivery and clinical barriers and facilitators in an integrated approach for fall prevention (Table 2). First, the results regarding what stakeholders currently do to prevent falls among elderly will be described. Thereafter, the results regarding the five concepts of the conceptual framework will be presented.

Table 2. Overview of the respondents

Respondents	Municipality
Domestic help	Leiden
Domestic help	Leiden
Caregiver	Katwijk
Caregiver	Leiden
District nurse	Katwijk
District nurse	Leiden
District nurse	Leiden
Physiotherapist	Leiden
Physiotherapist	Leiden
Geriatric	Katwijk
physiotherapist	
General practitioner	Leiden
Gym teacher and	Leiden
physiotherapist of a	
welfare organization	
Sport and exercise	Katwijk
coach of a welfare	
organization	
Policy officer WMO	Leiden
Policy officer sport	Katwijk
Employee of a health	-
insurance company	

5.1 Fall prevention in Hollands Midden

During the interviews, respondents of Leiden and Katwijk were asked what they currently do to prevent falls among elderly. This section will elaborate on what participants said in order to give more insight in how involved stakeholders in Leiden and Katwijk are in fall prevention.

During the interviews, it became clear that in Katwijk an integrated approach had been implemented earlier. This consisted of a fall outpatient clinic in which elderly that fall are screened for risk factors. Thereafter, they follow a fall prevention intervention course, which is given by a physiotherapist. After this course, elderly at risk are directed to a welfare organization for structural exercise. However,

this is no longer financed. Currently, the welfare organization in Katwijk only gets their referrals from one general practitioner and one physiotherapist. In Leiden, no integrated approach for fall prevention had been implemented.

The interviews showed that most of the participants who come in contact with elderly pay attention to identifying elderly with an increased risk of falling. Especially professionals in primary care and employees of homecare organizations engage in fall prevention. Employees of welfare organizations are less focused and domestic helpers are not focused on preventing falls among elderly.

Home care organizations and domestic helpers

Caregivers and district nurses mentioned that they pay attention to fall risks and have a risk inventory list that includes a section about falls in order to identify whether elderly have a risk of falling. In most home care agencies, this list is taken at the intake consult of a client and subsequently twice a year. When this list shows an increased risk for falling, they discuss this with their client and give them advice. They provide advice regarding the interior of the house, purchasing a walker, anti-slip socks etc. In situations that medical help is needed, district nurses call a general practitioner or physiotherapist in consultation with the patient.

Domestic helpers mentioned that they have little experience with elderly that fall. They pay little attention to fall risks among elderly and they do little to prevent falling. Furthermore, there is no protocol for domestic helpers on what should be done when someone falls.

Primary care professionals

The general practitioner mentioned that, in case of suspicion of an increased risk of falling, the nurse practitioner visits the homes of elderly in order to identify fall risks and develop a plan in which home care or welfare organizations can be involved.

When physiotherapists encounter a patient with possible increased risk for falling, they conduct tests and determine whether treatment or referral to other professionals is necessary. The two general physiotherapist included in this study do not often get patients referred for fall prevention by general practitioners or home care organizations, while the geriatric physiotherapist mentioned that she does get those referrals.

Welfare organizations

The sport and exercise coach mentioned that gym teachers from the welfare organization in Katwijk do not actively pay attention to fall risks in elderly. They are alert that elderly do not fall during exercise lessons, but they do not pay attention whether elderly show risk factors for falling in general.

The gym teacher of the welfare organization in Leiden is more alert on fall risks, because she has also been educated as a physiotherapist. In general, the welfare organization in Leiden has instructed gym teachers to ask elderly at risk if they want help.

5.2 Integrated approach for fall prevention

All participants in this study considered fall prevention to be important and their overall view on an integrated approach for fall prevention was positive. The majority of the participants noted that an integrated approach allows you to use each other's knowledge and expertise, to view the problem from different perspectives and to reach the elderly better. Furthermore, it ensures that there is communication and collaboration among different stakeholders, which results in better signalling and referrals. During the interviews, the conceptual framework of an integrated approach was shown and most respondents agreed with this approach for fall prevention.

"At the moment that you have good arrangements with each other and referral is smooth, because you can find each other literally and figuratively and have a good idea of the community resources, then you can notice a lot earlier that there is a problem and refer much better to good care and support."

- Respondent 15, policy officer WMO

5.3 Funding barriers and facilitators

Funding barriers and facilitators for an integrated approach for fall prevention were asked out during the interviews. A range of responses was elicited by the participants. Respondents mentioned financial barriers for themselves and expected financial barriers for elderly. Furthermore, a number of financial facilitators were mentioned.

Financial barriers for stakeholders

Most participants did not mention any financial barriers for themselves when an integrated approach for fall prevention would be implemented. Both general physiotherapists mentioned that they did not see any financial barriers for themselves when referring to other organizations for exercise programs or prevention interventions. Both indicated that they believed that it is important and that they would be willing to do it. However, this is in contrast with what was stated by the employee of the health insurance company. He expressed his belief that physiotherapists might be reluctant to refer to other organizations, because they benefit financially from keeping elderly in their practice and not referring them to other organizations that can offer exercise programs.

A small number of those interviewed suggested that not being paid for the required time consulting other health care professionals is considered to be a barrier. In addition, a domestic help expressed her concern for having to pay more attention to elderly with risks of falling.

"As a domestic help, you only get a certain number of hours and you cannot exceed it. You will not be paid for it. I think if you get more tasks like signalling then you also need more time I think."

- Respondent 7, domestic help

Financial barriers for elderly

When participants were asked about financial barriers in the developed integrated approach for fall prevention, the majority commented that financial barriers play a huge role for elderly. Participants believed that financial problems for elderly are most likely to occur when elderly with risk of falling are detected and further action is needed to purchase aids, go to a physiotherapist, prevention interventions or exercise programs for fall prevention. Most participants reported that elderly are often hesitant and will refuse, because they have little money to spend, find it a waste of their money, have other priorities and are not willing to spend their money on fall prevention.

"A lot of older people have little money to spend. So as soon as something costs money, that's a problem. [...] If they have to pay money for it, they will not do it."

- Respondent 5, general practitioner

Conversely, the sport and exercise coach from the welfare organization in Katwijk alluded to the notion of financial barriers for elderly to go to exercise programs. She mentioned that only a small contribution is required for those programs and it is also partly reimbursed by health insurance companies. Also, the employee of a health insurance company did not believe that more money is needed for fall prevention courses or for health care professionals.

"I think the most important thing is that you reach the target group and I do not know if that has to cost money. Yes, aside from the fact that you need to print a folder or something. I do not see anything now that should be structurally different in the financing structure towards healthcare providers. I do not see the solution in that. So not when I pay GPs more that I suddenly have more people in the fall prevention course.

- Respondent 13, employee of health insurance company

Furthermore, some participants stated that elderly may be referred to physiotherapy, but it is not always possible for them to go to a physiotherapist, because they have no supplementary health insurance. In addition, some participants mentioned that for those elderly that have a supplementary health insurance, the reimbursement of physiotherapy is limited and only a certain amount of treatments are reimbursed, while in some cases more treatments are needed.

Financial facilitators

To stimulate elderly to go to exercise and fall prevention courses, some participants mentioned that these courses should be totally or partly reimbursed. Also, some participants suggested the reimbursement of more treatments for physiotherapy when necessary and aids to prevent falling. However, most participants noted that not everything should be entirely free due to reimbursements or subsidies. They felt that elderly should also be asked for a small financial contribution. In addition, some respondents expressed their belief that money is needed to set up and organize an integrated approach for fall prevention. A physiotherapist and sport and exercise coach believed that physiotherapy and fall prevention courses should be financed in such an integrated approach.

Furthermore, some participants mentioned that more money should be available for domestic helpers to play a role in preventing falls by giving more time and training to signal fall risks. A domestic helper mentioned that a financial incentive would stimulate them to participate in courses to gain more insight in fall risks and it would make it more likely that they would take on the task of signalling.

So, if the domestic help is not cut, or cut in the number of hours, then they can do a little more. Then, for example, they can do the laundry and then someone does not have to make their own bed, because housekeeping does not have enough time to wash everything and then to dry and fold up. You know it's very little things that make people fall.

- Respondent 1, caregiver

Furthermore, participants mentioned government financing for district nurses to play a role in signalling community dwelling elderly with fall risks and the financing of meetings with other health care professionals regarding fall prevention. Currently, health care professionals are not paid for their collaboration, which means that you have to rely on the good will of all professionals.

Lastly, policy officers and the health insurance company employee were asked what they could contribute financially to an integrated approach for fall prevention. As mentioned earlier, the health insurance company employee did not believe that changes in finances were needed. The policy officer sport stated that municipalities can facilitate an integrated approach by initiating the project, making hours and employees available and providing funding. Furthermore, it was mentioned that you can experiment with the financial contributions of elderly. For example, continuing to exercise in a welfare organization after participating in a fall prevention course makes them get their contribution back. The policy officer WMO stated that they can make procurement agreements with health care professionals about what is expected of health care professionals in the integrated approach for fall prevention. In addition, agreements with health insurance companies can be made about purchasing care together.

5.4 Administrative barriers and facilitators

Several administrative barriers were mentioned by the participants. Barriers relating to time, registration, and regulation were mentioned.

Time barriers relating to administration

Some participants expressed that time is a barrier for sufficient administration. Especially employees of homecare organizations stated that they are under time pressure to do tasks in a certain amount of time. Also, it was expressed by a caregiver that there is a lack of employees in home care organizations, which results in the pressure to see a lot of clients in a short amount of time. Due to this time pressure, they do not have the time to report elaborately in the folders regarding a client and sometimes do not report at all. Also, a domestic helper mentioned that you do not always have the time to report elaborately. In addition, the geriatric physiotherapist stated that the lack of time prevents her from reporting digitally about a patient in the files of home care organizations.

"Yes, because if you come to a client to help with showering and you have 25 minutes for it and you actually need 35... yes, then you will pay less attention to other issues. Unconsciously, you do it maybe, but you will not actively report it. You see it yourself, but you do not report it."

- Respondent 3, caregiver

No facilitators for time relating to administration were mentioned.

Registration barriers

During the interviews, participants talked about which barriers they experience regarding the registration of patient's files and its transparency between different domains. Some participants mentioned that transparency of patient files with non-medical organizations would be difficult and it should be considered how you communicate with those organizations and what they are allowed to see. However, most participants believed that organizations such as welfare organizations should have no insight into the registration of medical records of patients. Participants believed that this is not necessary to ensure fall prevention and regulation of privacy prohibits non-medical professionals to have insight into medical records. Both employees of welfare organizations expressed that they do not have any administration regarding signalling of falls and do not think this should be their responsibility.

General physiotherapists did not mention any barriers in the exchange of medical data with general practitioners. However, one physiotherapist felt that it would be easier when professionals have insight in each other's files, because this prevents that you need to contact a professional when a referral is

not elaborate enough. However, she expressed her concerns regarding the achievement of such a system, because not everyone is allowed to see everything. The geriatric physiotherapist experienced several barriers regarding the registration of patient files with others. She mentioned that she does not have access to hospital administration and has to report twice when it concerns exchange with general practitioners, because of their own digital system. Furthermore, she mentioned that reporting in other health care professionals' files is a huge barrier, because it is difficult to access these files. Lastly, she stated that she does not report in the digital administration of home care organizations, because it takes too much time.

"Writing in a file now gives the problem that they almost all have digital files only. So, I have to adjust my computer to their file to access it. Well, it's already a drama to log in the GPs file, that is a KIZ. Then you need a portal, and you have to change your password every 3 months. Well, it makes you totally crazy, because then I just did not change it and I cannot enter it. Well, should you imagine that I get another 6 home care organizations where I need to login. Well that's a disaster. That is fine for them, but for the cooperation it is worthless."

- Respondent 6, geriatric physiotherapist

Most employees of homecare organizations mentioned that there were no barriers regarding their own registration. They did experience some barriers regarding the registration of patient records by others, while this was not mentioned by medical professionals. The main barrier mentioned was that general practitioners and physiotherapists do not report in the folder of homecare organizations. This means that you have to act on what is told by the client regarding their health. However, it would help when relevant information is shared so that they can anticipate on that.

"Sometimes it's useful for us to know that there are certain exercises needed for the client, so that you can stimulate that client."

-Respondent 3, caregiver

Domestic helpers have their own registration. One domestic help stated that their registration is not shared with others and the other domestic help doubts that others read it and indicated that she does not know anything of a client before she enters the house.

"I think that's the biggest problem. I can write it down in such a folder or call Zorgtalent and ask can you pass this on to home care or an informal caregiver. But then it really has to happen and it has to be taken seriously and I wonder if that will."

- Respondent 7, domestic help

Registration facilitators

Most respondents advocated for a universal ICT system/care portal for the registration of patient files where relevant information is shared among professionals to improve communication, to have more information and to be time efficient. However, one general practitioner stated that a care portal is not feasible for general practitioners, because it will mean that you have to report information twice, in your own registration and in the universal ICT system/care portal. Furthermore, one participant mentioned that it is important to have a system that is easy to access and allows you to report easily.

"That we as healthcare providers all communicate through that electronic client file and then you really see an added value. Then you also see what has been done and what did not succeed. In that you can also transfer and good interventions you can... you can work well together."

- Respondent 11, district nurse

Furthermore, employees of home care organizations mentioned that it would help when health care professionals report in their files and that feedback is given for them to be up to date. This gives more insight, certainly because clients often do not remember or understand correctly what other health care professionals have said. Furthermore, a domestic help said that having a folder in which both domestic helpers as employees of a home care organizations can report would facilitate communication. Lastly, another domestic help mentioned that information should be given about a patient before she visits them.

Regulation barriers

Some participants mentioned regulation as a barrier for fall prevention. A caregiver and a geriatric physiotherapist noted that they feel pressure from health insurance companies regarding the amount of time in which they have to perform their tasks/care, which negatively influences their care for fall prevention.

"Yes, the time pressure is something, yes sure you signal it, but you cannot always do something with it. And that's just the time pressure and that comes from the health insurance company. Because they have so many demands, like this you can do for this and that you can for do that."

-Respondent 3, caregiver

The policy officer WMO mentioned that law and regulation can be confusing at times. It is not always clear for professionals which act pays for which care and which health care professionals or which

organization is needed for further action. Also, sometimes professionals have different ideas of what a particular policy rule entails and interpret these wrongly.

Regulation facilitators

Policy officers of the municipalities mentioned that when law and legislation prevent professionals from taking certain measures, municipalities can consider how professionals can be given more freedom that fits within the policies of the municipalities. In addition, it was stated that municipalities and health insurance companies can work together to solve the problem regarding financing. Lastly, it would help when municipalities and health insurance companies talk openly with people in practice about what administration or regulation prevents them in their care for fall prevention.

5.5 Organizational barriers and facilitators

Participants were asked about barriers and facilitators they experience in the collaboration and working relationships within and between organizations. Organizational barriers and facilitators regarding reaching each other, time, communication and working relationships were mentioned.

Barriers regarding reaching each other

When participants were asked what barriers they experience in the collaboration with others, the majority commented that not getting a hold of each other and not knowing who you should contact or to who you should refer elderly were considered the most important barriers. Participants stated that it can be hard to get a hold of a someone, because of free working days or vacations. In addition, participants felt that it is difficult to get a hold of the right professional. Some participants stated you often do not get to speak the right person immediately and have to be referred which can take a lot of time. Furthermore, participants indicated that they are often unware of each other and what others can mean for fall prevention. Participants commented that they often do not know who to contact or to whom should be referred and how they should refer. Also, primary care professionals often do not know about the offer of welfare activities.

"Well, I think care and well-being must get to know each other a lot better. Because we have to know where we can send people to."

- Respondent 16, physiotherapist

Facilitators regarding reaching each other

The majority of the respondents mentioned that for better referrals and reaching each other better, it is important to know what partners are involved, which role they have, and what their expertise is concerning fall prevention. Furthermore, participants stated that it helps when you know each other personally and that it is important that you can find each other easily and quickly for referrals. The

policy officers and employee of the health insurance company mentioned that they can contribute to better reaching each other by organizing meetings and bringing the stakeholders together in order for them to know each other and each other's role.

Organizational barriers regarding time

A small number of participants mentioned that they do not have enough time for collaboration and that more time should be available for collaboration. Two caregivers mentioned that due to time constraints, they sometimes have to call about a patient in their free time. In addition, one caregiver mentioned that there often is a queue when you call a general practitioner, which is time consuming.

No facilitators for time relating to organization were mentioned.

Barriers regarding communication

The majority of participants did not mention any barriers in the communication with other professionals. Especially the communication between general practitioners and physiotherapists seemed to be going well. Domestic helpers and welfare organizations do not have any collaboration with other health care professionals, so therefore could not mention any barriers regarding communication. Barriers regarding communication with others were mostly experienced by one caregiver. A caregiver indicated that the communication with a general practitioner is not always optimal, because they do not always act on the signals provided by caregivers. Two caregivers mentioned that communication with general practitioners often goes through a lot of layers which can cause poor communication.

"Perhaps the many layers you have. Because I observe it, then I write it in a file, my colleague will call via the assistant. The assistant will pass it on to the general practitioner again. So, there are several steps."

- Respondent 1, caregiver

A physiotherapist mentioned that there is often no communication between health care professionals when a patient is referred, because it goes via the general practitioner. It is important that there is communication in order to know whether another professional has treated a patient and what has been advised. This is more difficult when you are not in the same building.

"Well, we have dieticians in this building here too. So, then you are able to find each other, even if it is in the hallway or by mail. But that's tricky if they are somewhere else. Then you really have to ask if someone has done something with it or you're going to ask that person

like have you been to the dietitian and what was the advice. Then you try figure it out in that way or you are going to ask whether you may contact their dietician."

- Respondent 16, physiotherapist

Facilitators regarding communication

Several facilitators were mentioned for an improved communication between stakeholders in an integrated approach for fall prevention. The majority of the participants advocated for multidisciplinary meetings with different stakeholders in order to improve communication. Furthermore, two employees of home care organizations stated that communication between home care organizations and primary care and secondary care should be organized for better care delivery. Also, a domestic helper advocated for communication between domestic helpers and home care.

In contrast, one physiotherapist mentioned that she did not think that home care organizations should have direct communication with physiotherapists. She stated that when they signal fall risks, it would be better that they communicate with a general practitioner in order to oversee it and to prevent that several initiatives are going on. The policy officer WMO stated that municipalities can facilitate knowledge exchange between medical and social domain by making agreements and checking whether more expertise is needed.

Barriers regarding working relationships

Not many barriers were mentioned regarding working relationships with other stakeholders. The barrier that was mentioned the most among participants was the willingness of professionals to cooperate and different interests among professionals. Participants expressed their concern regarding the willingness of general practitioners to cooperate in an integrated approach and to be open for other collaboration partners. Some participants mentioned that you have to be careful in the collaboration with general practitioners and prevent that you do not offend them. It was stated that for a successful integrated approach for fall prevention the general practitioner is imperative. However, participants believed that it depends on the general practitioner whether they will be willing for a collaboration. In contrast, there were also some participants that reported that they did not experience any barriers in their working relationship with general practitioners.

"Well, that's not easy, because the general practitioner always has a central role in all treatment plans and then it just depends on what kind of general practitioner you have to deal with whether they are open-minded or are offended when you want to have a meeting."

- Respondent 6, geriatric physiotherapist

Furthermore, the policy officer WMO and employee of the health insurance company stated that stakeholders may have different interests, which can be a barrier for their willingness to cooperate in an integrated approach.

Facilitators regarding working relationships

Participants found it difficult to mention facilitators that would improve the working relationships among stakeholders. Most participants mentioned that it just depends on the kind of person you are working with. One geriatric physiotherapist indicated that speaking the same professional language may improve collaboration with general practitioners as they will be more open for collaboration.

"I think if you want to establish a good collaboration, it is very important that you as a therapist can conform to the standards of "The Dutch College of General Practitioners" (In Dutch: Nederlands Huisartsen Genootschap). Because they work from it and if you use the same language that is in that file, they are more open than when you come up with your own language that you think is important to set up. Because then you'll be a know it all with your own ideas."

- Respondent 6, geriatric physiotherapist

Furthermore, the policy officer Sport and the employee of the health insurance company indicated that it is important to ensure that everyone has the same intention for elderly to overcome different interests of stakeholders. Municipalities can have a facilitating role by organizing meetings. In addition, the employee of the health insurance company stated that everyone needs to speaks the same professional language.

5.6 Service delivery barriers and facilitators

Several barriers and facilitators regarding service delivery for fall prevention were mentioned by participants. Barriers and facilitators regarding responsibility for fall prevention, training of stakeholders, work pressure, attitude of elderly towards fall prevention, referring to preventive interventions and services not in line with patients' needs were mentioned.

Barriers regarding responsibility for fall prevention

Various answers were given in response to the question whether stakeholders experience barriers regarding the responsibility of signalling fall risks or referral to others for fall prevention. Mainly, employees of home care agencies and physiotherapists did not mention any barriers in acting on their responsibilities of signalling fall risks or referring to others. However, a general practitioner pointed out that it is not feasible to hold general practitioners fully accountable for signalling fall risks in elderly.

"With every patient, there are also 10 other things that you can pay attention to preventively. Like whether someone does not smoke too much, does not drink too much or whether someone hits his wife or whether someone falls, you know. And on everything you can be preventive but if you think about it, it is not possible. So yes, you can make the general practitioner responsible for everything, but that is not possible in daily practice."

- Respondent 5, general practitioner

Welfare organizations indicated that that their role should not go further than giving advice about going to a general practitioner or physiotherapist to their participants. In addition, the sport and exercise coach indicated that welfare organizations should not be responsible for actively paying attention to fall risks in elderly, which was in contrast with the opinion of the gym teacher in Leiden.

Furthermore, among domestic helpers a feeling of not being responsible for signalling was expressed. Currently, they feel that they are only responsible for cleaning the house. A domestic helper also reported that most domestic helpers do not signal elderly with risk, because they feel that health care professionals are being paid to do that.

"I do not know, I think it's a little bit the impression that you do the household and further you do not have anything to do with it."

- Respondent 4, domestic help

Facilitators regarding responsibility for fall prevention

Participants were asked how they could be stimulated to act on their responsibilities of signalling falls risks and referring in fall prevention. Primary care and employees of home care organizations indicated that they did not experience barriers in acting on this responsibility, so therefore did not mention any facilitators.

Domestic helpers expressed that they would be willing to pay more attention to fall risks. One domestic helper and a caregiver felt that domestic helpers are able to see a lot of things, because they are for long period of times at the homes of elderly. Another domestic help mentioned that she especially sees the role for fall prevention for domestic helpers that frequently come at the home of elderly. Both domestic helpers expressed that domestic helpers would feel more responsible for signalling fall risks when it is included in their job description and when they know what to do.

The employee of the health insurance company mentioned that in order to stimulate stakeholders to act on their responsibilities in fall prevention they can form a network, inventory the needs of stakeholders and provide training when needed. Furthermore, the policy officer Sport stated that it helps when stakeholders are included in the whole thinking process of setting up an integrated approach in order to create broad support. Lastly, municipalities can contribute by bringing stakeholder together and activating the integrated approach.

Barriers regarding training of stakeholders

General practitioners and physiotherapists stated they are trained well to signal fall risks and to treat patients. Mostly, domestic helpers and a caregiver expressed the need for training to be able to sufficiently signal fall risks in elderly. Especially domestic helpers indicated that they do not know what risk factors for falling are and what to do when they signal it.

"I often do not know where to go to... what you can do about. And I really do not know what to look for. Those rugs that are loose, you look at that, but I would not really know what to look for further actually."

- Respondent 4, domestic help

Furthermore, the sport and exercise coach from Katwijk mentioned that gym teachers do not sufficiently know how to signal fall risks. The gym teacher of Leiden stated that gym teachers know something about fall risks, but do not actively pay attention to it. A general practitioner mentioned that general practitioners often do not know about the offer in welfare, because they are more focussed on medical interventions.

Facilitators regarding training of stakeholders

Most participants indicated that more training is needed for domestic helpers, employees of home care and welfare organizations to signal fall risks, which can be done by a course, information evening, clinical lesson or brochures. Furthermore, the general practitioner, geriatric physiotherapist and general physiotherapist mentioned that in refresher training attention should be paid to integrated approaches.

Barriers regarding work pressure

Only employees of home care organizations and a domestic help mentioned work pressure as a barrier for their role in fall prevention. Home care organization employees mentioned that they not always have enough time to signal fall risks or do not have enough time to act on those signals. Furthermore, they stated that work pressure results in rushing tasks and paying less attention to other things than their tasks. In addition, a caregiver and geriatric physiotherapist noted that they feel time pressure from the health insurance company to finish their care in a certain amount of time.

"At first, we had 15 minutes to take of compression stockings and that is easy to do in that time. That's now 10 minutes. You know and I am also able to do that in that time, that's not a problem, but those 5 minutes that you had to spend a little more attention to a client and can see how they are you doing, that is getting less."

- Respondent 1, caregiver

Facilitators regarding work pressure

Not many facilitators regarding work pressure were mentioned by participants. Only one caregiver mentioned that she would like a broader indication of her time to be able to act on fall risk signals.

Barriers for referring to preventive interventions for falling

Nearly all participants indicated that they do not refer elderly to preventive interventions for falling or exercise programs at welfare organizations. Most respondents mentioned that they saw the importance of such programs and would be willing to refer to it. The major reason for not referring to these kind of interventions is that they are not aware of this offer. Furthermore, one general practitioner mentioned that it is difficult to be up to date with this offer, because it changes very often.

"You do not want to know how many institutions there are that incorporate things into their programs every time. After a while, one has expired and then they have something new again. So, in social work, at the GGZ, the GGD and so on. And of course, we do not only deal with elderly, also with young people, with foreigners and well with very different groups that all have a different offer by different organizations. So, we cannot keep track of what is there."

- Respondent 5, general practitioner

In addition, a district nurse indicated that she does not refer elderly, because she does not believe that they will take her advice.

"I think because if I'm not even successful with referring the physical therapist. I can think of all kinds of other things, but I do not have the idea that it works."

- Respondent 11, district nurse

Facilitators for referring to preventive interventions for falling

Participants felt that more information should be disseminated about fall prevention programs and exercise programs. This can be done by information on the internet, brochures, newspapers, press releases, presentations and social media. Respondents stated that they need information about the offer, the organization, how to contact and who to contact for referrals. In contrast, a general practitioner expressed his concern for providing information brochures, because they are often not up

to date. He suggested to provide websites and to have a specific contact person to whom they can refer. Also, a caregiver mentioned that a contact person should be established.

Municipalities primarily mentioned that they can facilitate the map for community resources, which contains information about formal and informal organizations and activities regarding living, health and welfare, work and income and children and youth. On the other hand, employee of health insurance company mentioned that offer for fall prevention should be less complex and easier labels should be attached to it, instead of various names for the same course.

Barriers regarding attitude of elderly towards fall prevention

A major barrier experienced in service delivery by the majority of participants was the attitude of elderly when they are advised regarding fall prevention. Participants expressed that you can advise elderly to go to a physiotherapist, exercise programs, prevention interventions or making adjustments in the home to prevent falling, however elderly are often not willing to do this. Participants mentioned that elderly are often stubborn, do not see the importance of fall prevention, are reluctant in changing and are not aware of fall risks. This is experienced as a barrier, because it means stakeholders cannot properly prevent falls.

"You keep on saying it, but you cannot force those people in their own home to throw away or get rid of things."

- Respondent 3, caregiver

Facilitators regarding attitude of elderly towards fall prevention

Participants stated that more information should be disseminated among elderly in order to improve the attitude of elderly towards fall prevention and to stimulate them to engage in fall prevention. Information regarding the importance and possibilities for fall prevention and information about fall risks is needed. In addition, a general practitioner stated that information should be provided to inform elderly that they should not be afraid to admit that they fall. It was also mentioned by a physiotherapist that information or posters should be available in waiting rooms of professionals.

"Well, I think there should be more attention, more familiarity among the elderly that more is possible, which can be done with television commercials or something. A lot of older people are afraid to give up their vulnerability because they are afraid that they ... that others will take care of them, lose their independence or that they get interfering people around them."

- Respondent 5, general practitioner

Furthermore, municipalities mentioned that calling elderly citizens in their municipality about offer for fall prevention or home visits could be a way to reach vulnerable elderly. During these home visits, they can be asked whether they need any help and can be motivated to participate in fall prevention. In addition, municipalities can raise more awareness by providing information in city newspapers and in places where elderly often come.

Barriers regarding services in line with patients' needs

Not many barriers were mentioned regarding services that are not in line with the needs of patients. Only, the policy officers and employee of health insurance company mentioned that fall prevention interventions or exercise programs do not always reach elderly, because these programs often do not cater to their needs. Lifestyle, belief and the preferences of elderly are often not sufficiently taken into consideration. This is considered a barrier, because when such programs are not in line with the needs of elderly, it is more likely that they will not participate or will drop out after a while.

"When you put a of relatively vital elderly in a group with someone who barely can put one foot before the other... yes then one of the two will drop out. [...] So, you will have to look very well at your offer in this area and not just say like oh we have a lesson for the elderly and there they can go to, because then they will not go."

- Respondent 14, policy officer Sport

Facilitators regarding services in line with patients' needs

Several respondents expressed that fall prevention interventions or exercise programs should be in line with the needs of patients. A wide variety of interventions or programs is needed in order to appeal to different groups of elderly. Socioeconomic status, belief, interests and physical fitness should be taken into account in interventions and programs in order to ensure that elderly will participate.

5.7 Clinical barriers and facilitators

The majority of participants did not mention clinical barriers or facilitators for fall prevention. A general practitioner mentioned a barrier regarding the maintenance of patient provider communication. He stated it can be difficult to signal all elderly with fall risk, because there are always patients you do not see often and are doing well and then suddenly deteriorate. However, he mentioned that you cannot do anything about that. Furthermore, some participants indicated some barriers relating to no shared understanding of patients' needs. It was mentioned by caregivers that not every employee understands the needs and is aware of the factors that can cause falling.

Furthermore, the geriatric physiotherapist stated that the referral of the general practitioner for fall prevention does not always provide enough information to be adequately aware of all aspects.

"If I get referrals for fall prevention then it just says: Patient has fallen once and is afraid to fall, physiotherapy at home. Then I think yes, how is that helping, it is not. I have to have the diagnosis, what is the underlying cause of falling."

She mentioned that for a comprehensive diagnosis, good contact with the general practitioner or the nurse practitioner is necessary. Furthermore, a physiotherapist and district nurse stated that they are not always on the same page with a general practitioner about what a patient needs. Lastly, the employee of a health insurance company mentioned that not speaking the same professional language may pose a barrier, which can be solved by organizing a meeting or training.

6. Discussion and conclusion

In this chapter, the findings of this study will be discussed and placed in a broader context within existing literature. In addition, strengths and limitations of the study will be described. This chapter will conclude with implications for further research and recommendations to the GGD HM and municipalities regarding an integrated approach for fall prevention.

6.1 Barriers and facilitators for an integrated approach for fall prevention

Preventing falls among elderly by establishing an integrated approach for fall prevention is extremely important in the Netherlands. Recent research of the Central Bureau for Statistics (CBS) highlights the importance of fall prevention as falls are placed in the top 10 of death causes in the Netherlands (Centraal Bureau voor de Statistiek, 2017). Due to the importance of fall prevention, the aim of this study was to explore barriers and facilitators for an integrated approach for fall prevention by conducting interviews with 16 stakeholders in Leiden and Katwijk. The integrated approach consisted of signalling and screening by community organizations and primary care, clinical risk assessment and treatment and referring to prevention interventions or exercise programs. Based on the interviews, several barriers and facilitators regarding funding, administration, organization, service delivery and clinical side in an integrated approach for fall prevention were identified.

This study showed that especially organization and service delivery were experienced as huge barriers for an integrated approach for fall prevention by participants in Leiden and Katwijk. The most important barriers related to organization are not getting a hold of each other and not knowing who to contact or to who to refer. In general, working relationships between stakeholders seemed to be going well. Participants mentioned that collaboration with general practitioners is not always easy, but it depends on the person you have to deal with. Furthermore, not many barriers regarding communication were mentioned by participants. In order to improve collaboration among stakeholders, it is important to know which stakeholders are involved in the integrated approach and what their expertise is. In addition, knowing each other personally was considered to be a facilitator and some participants advocated for a contact person. An important facilitator for good communication is organizing multidisciplinary meetings.

Moreover, several barriers and facilitators regarding service delivery were mentioned. This research showed that currently not everyone is trained well enough to take up a role in an integrated approach for fall prevention. This applies especially to domestic helpers and personal caregivers. Furthermore, among employees of home care organizations and a domestic help work pressure was mentioned as a barrier to pay attention to fall risks in clients. Referring to prevention interventions for falling or exercise programs at welfare organizations is an important step in the conceptual framework. This research showed that nearly all participants were not aware of this offer and therefore did not refer to

it. Lastly, a common theme expressed by stakeholders was the attitude of elderly. Stakeholders felt that they can advise elderly regarding fall prevention, but they will be reluctant, because they are not aware of the risks and do not see the importance of fall prevention. Facilitators regarding service delivery that were mentioned by participants were that more training should be provided for everyone to be able to sufficiently signal fall risks and refer to others. Furthermore, it is important that more information about fall prevention interventions and exercise programs is disseminated and a contact person who to contact should be established.

The interviews showed that funding did not seem to be a barrier for most stakeholders. Only a minority of participants expressed that not being paid for the time spend to collaborate with others was considered a barrier. During the interviews, participants primarily expressed expected financial barriers for elderly. They believed that elderly are reluctant to engage in fall prevention interventions or exercise programs, because they do not want to pay for it or cannot pay for it. Participants also indicated that some elderly do not have a supplementary insurance which means that they cannot go to a physiotherapist in order to prevent falling. Several financial facilitators were mentioned by participants. Participants suggested that fall prevention interventions, exercise programs and physiotherapy should be either partly or fully reimbursed. Furthermore, some participants indicated that money should be available for district nurses and domestic helpers to be able to signal elderly with fall risks. Lastly, municipalities can facilitate an integrated approach by making procurement agreements with stakeholders and initiating the integrated approach.

Several barriers regarding administration in an integrated approach for fall prevention were mentioned. Some participants believed that regulation of health insurance companies restricts them in the time they have to perform their tasks/care. Furthermore, barriers that were experienced were not having enough time to report elaborately and that stakeholders do not report in each other's patient files. Most respondents advocated for a universal ICT system/care portal in which relevant information of patients' files can be shared in order to be up to date, communicate and to provide the best care. However, privacy regulation has to be taken into account.

Clinical barriers were not mentioned by the majority of participants. Barriers that were mentioned were that not all stakeholders are aware of the risk factors of falling in elderly, being on the same page about further action with other stakeholders and not enough information on the referrals.

6.2 Comparison with literature

6.2.1 Barriers and facilitators for an integrated approach for fall prevention

This study's findings appear to be consistent with similar research that investigates barriers and facilitators of integrated care and interprofessional collaboration (Baxter & Markle-Reid, 2009;

Jorgenson, Laubscher, Lyons, & Palmer, 2014; Ling, Brereton, Conklin, Newbould, & Roland, 2012; Lyngsø, Godtfredsen, & Frølich, 2016; Moore et al., 2013).

A major barrier identified in this study was that participants are often unaware of what other stakeholders can mean for fall prevention and who should be contacted or referred to. Participants mentioned that it is important to know each other personally and to know what each other's expertise is. In line with this study, Baxter & Markle-Reid (2009) showed that a facilitator for interprofessional collaboration is personally knowing each other. In addition, they showed that when stakeholders are familiar with each other's roles they are more likely to make use of each other. Furthermore, literature shows that the understanding of one's role and responsibility is extremely important in an integrated approach in order to build team capacity and trust (Baxter & Markle-Reid, 2009; Jorgenson et al., 2014; Moore et al., 2013). King & Ross (2003) showed that when there is too much confusion about roles, this can lead to a defensive attitude of employees about their traditional identities and roles.

Research shows that proper communication among different stakeholders is also extremely important for an integrated approach (Baxter & Markle-Reid, 2009; Lyngsø et al., 2016). The majority of respondents of this study advocated for multidisciplinary meetings to facilitate communication. This is also supported by other research (Baxter & Markle-Reid, 2009). In addition, one participant in this study mentioned that communication is facilitated when stakeholders are located in the same building. Ling et al. (2012) also showed that communication between stakeholders is facilitated when they work in the same building, because then you are able to access each other more quickly (Ling et al., 2012).

Furthermore, research showed that good working relationships, trust and respect between stakeholders is associated with success for an integrated approach (Jorgenson et al., 2014; Ling et al., 2012). When dealing with medical and social professionals in an integrated approach, it is important to consider cultural differences, hierarchical division and professional boundaries (Leichsenring, 2004; Ling et al., 2012). Research showed that stakeholders will be less cooperative in an integrated approach when they perceive that they have less power (Cott, 1997; Davies, 2000; Rutherford & McArthur, 2004). A perception of team balance and equality is important to gain trust and confidence in each other which will help to create a non-threatening environment (Molyneux, 2001). The majority of participants in this present study did not mention these aspects. Only one care giver mentioned that general practitioners do not always act on signals provided by home care organizations and some participants mentioned difficulties in their collaboration with general practitioners. Although not mentioned often in this research, it is extremely important to overcome these barriers. This can be achieved by having a leader that brings different stakeholders together and ensures that everyone has the same shared goals and vision and a feeling of shared responsibility (Ling et al., 2012; Lyngsø et al., 2016). When

domestic helpers are also included in signalling fall risks it is important that power struggles are diminished and that each stakeholder is taken seriously for an effective integrated approach.

An important facilitator that was identified during this study regarding service delivery was adequate training in order to be able to signal fall risks and to refer to others. Research of Ling et al. (2012) corroborated this and showed that the provision of training is important to be clear what stakeholders are allowed to do and to be prepared for their new roles. In this study, this is specifically the case for domestic helpers that experience a feeling of not knowing what they can do in fall prevention as they currently do not have this task.

In this research, funding did not seem to be a barrier for most stakeholders. However, some participants mentioned that collaboration costs a lot of time and that not being paid for this is considered to be a barrier. In addition, a domestic help expressed the concern of having to signal fall risks, because she only gets paid for a certain number of hours and does not get paid when she exceeds this. This is in line with other research that shows that participants often feel that tasks related to integrated care are on top of their existing workload (Ling et al., 2012). Interestingly, the research of Chou, Tinetti, King, Irwin, & Fortinsky (2006) showed that primary care providers experience not being reimbursed for the time required to assess fall risks as a barrier. This was not mentioned by any of the primary care providers in this study, which may be the results of social desirable answering when they were asked about financial barriers. Furthermore, this research showed that in an integrated approach information transfer is pivotal as the majority of participants advocated for a universal ICT system. This was also shared by other participants in other research (Lyngsø et al., 2016).

6.2.2 Attitudes of elderly towards fall prevention

An important finding of this study was the supposition of the attitude of elderly towards fall prevention. Participants mentioned that most elderly are reluctant towards fall prevention, because they do not see the importance of fall prevention and are not aware of fall risks. This was considered a huge barrier among participants, because they can advise elderly and refer them in an integrated approach, however this will not help. This is corroborated by literature. Literature shows that elderly perceive fall prevention not relevant or appropriate, only necessary for older or more disabled people and do not acknowledge that they are at risk of falling (Yardley, Bishop, et al., 2006; Yardley, Donovan-Hall, Francis, & Todd, 2006). Furthermore, research showed that elderly reject advice regarding fall prevention, because they are afraid of losing their identity and autonomy (McMahon, Talley, & Wyman, 2011; Yardley, Donovan-Hall, et al., 2006). Furthermore, Yardley et al. (2006) showed that costs and prevention interventions for falls that are not in line with the needs of patients are barriers for participation, which also was found in this study. Research shows that the uptake of

fall prevention interventions or exercise programs can be promoted when the focus is more on positive benefits for health and well-being (Yardley, Bishop, et al., 2006; Yardley, Donovan-Hall, et al., 2006).

6.3 Strengths and limitations

A number of strengths of this study should be noted. First of all, this is one of the few studies that investigated barriers and facilitators for an integrated approach for fall prevention among elderly. Furthermore, based on literature an integrated approach for fall prevention was developed in this study to signal and screen elderly with fall risks and eventually prevent falling among elderly. This model provides a great overview of which stakeholders are involved and how falling among community dwelling elderly can be prevented. In addition, a strength of this study is the inclusion of a wide range of stakeholders involved in fall prevention, which provides insight in barriers and facilitators for each stakeholder that should be considered when developing an integrated approach. Another strength of this study is that participants were sent summaries of the interviews in order to check whether the researcher interpreted the data correctly. Lastly, the first interview was coded with another researcher in order to discuss and agree upon codes and themes for the following interviews, which strengthened the validity.

A number of limitations of this study also must be acknowledged. A limitation of this research is that in Katwijk not every stakeholder could be interviewed, which means that we do not know for each type of stakeholder in Katwijk which barriers and facilitators they experience. Originally, the intention was to include three participants for each type of stakeholder; two from Leiden and one from Katwijk. However, this was not possible for domestic helpers and general practitioners, which were only interviewed in Leiden. However, in Leiden we were able to interview two different type of domestic helpers; one was a student with a temporary contract and one with regular employment. This provided insight into perspectives of different types of domestic helpers. Furthermore, a limitation of this research was the low response of general practitioners in the sample. Only one general practitioner was included. The recruitment of general practitioners proved to be difficult, because most general practitioners mentioned that they did not have time to participate in an interview. Only one general practitioner in Leiden was willing to participate in an interview, which may have resulted in nonresponse bias. Furthermore, a limitation of this research is that due to the qualitative nature of the study the results of this study are not representative for Hollands Midden and limits our ability to make conclusions about the relative importance of the concepts. However, the aim of this research was not to quantify the relative importance of concepts, but to identify which barriers and facilitators were experienced regarding the concepts. Lastly, stakeholders' perceptions of financial barriers and facilitators for elderly and their attitude towards fall prevention may not be in line with the perspectives of elderly themselves. More research is needed to provide insight into the perspectives of elderly.

6.4 Implications and recommendations

This study has advanced our understanding of important barriers and facilitators for establishing an integrated approach for fall prevention in Hollands Midden. In this study, all stakeholders considered fall prevention important and indicated that they wanted to play a role in an integrated approach for fall prevention. However, the way that it is currently organized does not allow effective and efficient fall prevention and significant changes have to be made. The knowledge acquired from this study can be used by policymakers and organizations to implement an integrated approach for fall prevention.

For a successful integrated approach for fall prevention, it is important that stakeholders are brought together by the GGD HM or municipalities in order to meet each other and become aware of each other's role in an integrated approach for fall prevention. This will facilitate referral among stakeholders. It is also important that referral to other stakeholders is easy and quick. This can be established by having a specific contact person whom can be contacted. In addition, it is important to consider working relationships among stakeholders and to ensure that everyone is willing to cooperate in an integrated approach. A project leader should be assigned that can facilitate a shared vision and goal, which may make stakeholders more likely to collaborate. When an integrated approach is established it is important to consider cultural differences, hierarchical division and professional boundaries.

The inclusion of domestic helpers in an integrated approach for fall prevention is recommended. Currently, they do not pay attention to fall risks in elderly, but they could have a pivotal role in an integrated approach, because they are able to see and find out a lot concerning the health of elderly as they spend multiple hours at the homes of elderly. It should be made clear that signalling fall risks is included in their job description and they should receive proper training in order to know what they should pay attention to and what further action is needed. Also, for employees in home care organizations training should be provided to be able to sufficiently signal fall risks.

Besides sufficient training to have a role in an integrated approach, it is also important that all stakeholders are given enough time to signal and screen fall risks in elderly and to collaborate with others. It should be considered how stakeholders can be given more time to prevent that they experience work overload. Also, proper communication between stakeholders regarding a client/patient should be considered. An ICT system should be developed that allows stakeholders to report easily regarding the health of a client/patient. This ensures that every stakeholder is up to date and facilitates easy referrals. Especially for employees of home care organizations and domestic helpers this means that they have more insight in the health of their client and can anticipate better. However, it should also be considered what different types of stakeholders are allowed to see due to privacy regulation and how this can be established in such a system.

Furthermore, it is extremely important that more information is provided regarding fall prevention interventions or exercise programs at welfare organizations for stakeholders to be able to refer. For instance, information meetings can be organized by GGD HM or municipalities. However, it is important to consider how stakeholders want to be informed about it in order to prevent overload of information.

Although this research has provided novel insights into barriers and facilitators for an integrated approach, considerably more work will need to be done in order to prevent falls among elderly. This research showed that a huge barrier is that elderly are not open for fall prevention advice, which means that an integrated approach will ultimately not help to prevent falls. Further research is needed in order to determine how elderly in Hollands Midden can be motivated for fall prevention and whether financial reasons play a role for elderly. Further research should also focus on gaining insight into the perspectives of other relevant stakeholders that can be included in an integrated approach for fall prevention, such as informal caregivers, ergo therapists, apothecaries, nurse practitioners and social district teams.

6.5 Conclusion

The aim of this study was to give recommendations to GGD HM and municipalities in Hollands Midden about barriers and facilitators for establishing an integrated approach for fall prevention. This was done by conducting interviews with various stakeholders involved in fall prevention. This study showed that funding and clinical barriers do not play a huge role for most stakeholders in Leiden and Katwijk. However, administration, organization and service delivery seem to play a large role in an integrated approach for elderly. A system should be established that allows clear communication between stakeholders to hand over patient information. Furthermore, in an integrated approach it is important to establish clarity about roles and responsibility in order for stakeholders to be able to refer to each other. Furthermore, it is important that stakeholder know each other personally for referrals to be easy and quick. Also, training should be provided for all stakeholders to be able to act on their responsibility. Further research is needed regarding how elderly can be motivated to take up fall prevention advice and to participate in fall prevention interventions.

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Appendix 1: Overview of municipalities in GGD HM

The region Hollands Midden consists of 2 sub-regions: Zuid-Holland Noord and Midden Holland. These 2 sub-regions consist of a number of municipalities.

Municipalities of Zuid-Holland Noord: Alphen aan den Rijn, Hillegom, Kaag en Braassem, Katwijk, Leiden, Leiderdorp, Lisse, Nieuwkoop, Noordwijk, Noordwijkerhout, Oegstgeest, Teylingen, Voorschoten, Zoeterwoude

Municipalities of Midden Holland: Gouda, Waddinxveen, Zuidplas, Bodegraven-Reeuwijk, Krimpenerwaard



Appendix 2: Valanalyse 65+

In the Netherlands, a fall analysis tool called Valanalyse 65+ has been developed by Veiligheid NL in order to screen elderly. This tool has been developed for health professionals in primary care in order to identify elderly at risk for falling and to provide a tailored advice. This tool can also be used by physiotherapists, ergo therapists and paramedics (Veiligheid NL, n.d.; Loket Gezond Leven, n.d.). The first component of the Valanalyse 65+ includes a fall risk test, which consists of three questions that helps to determine whether elderly have an increased risk of falling. This test takes approximately 1 minute. An advantage of this quick screening is that it is time efficient and ensures that health care professionals only perform extensive screenings with elderly that have an increased risk of falling (Veiligheid NL, n.d.; Loket Gezond Leven, n.d.). The second and third component of the Valanalyse 65+ can be used to analyze the fall risks and ensure prevention. The second component of the Valanalyse 65+, fall analysis, consists of multiple tests that provide insight into factors that result in higher risk of falling, such as mobility problems, medication use and vision problems. This way it can be identified which risk factor specifically contributes to the increased risk of falling in the particular elder. The last step of Valanalyse 65+ is advice and referral. In the Valanalyse 65+ practical advices are included that help to give tailored advice to elderly. Furthermore, a tool is included that shows the offer for fall prevention interventions in the region. This ensures that the health care provider can refer the elderly at risk to the proper organization (Veiligheid NL, n.d.; Loket Gezond Leven, n.d.).



Appendix 3: Flowchart for identifying elderly with fall risks

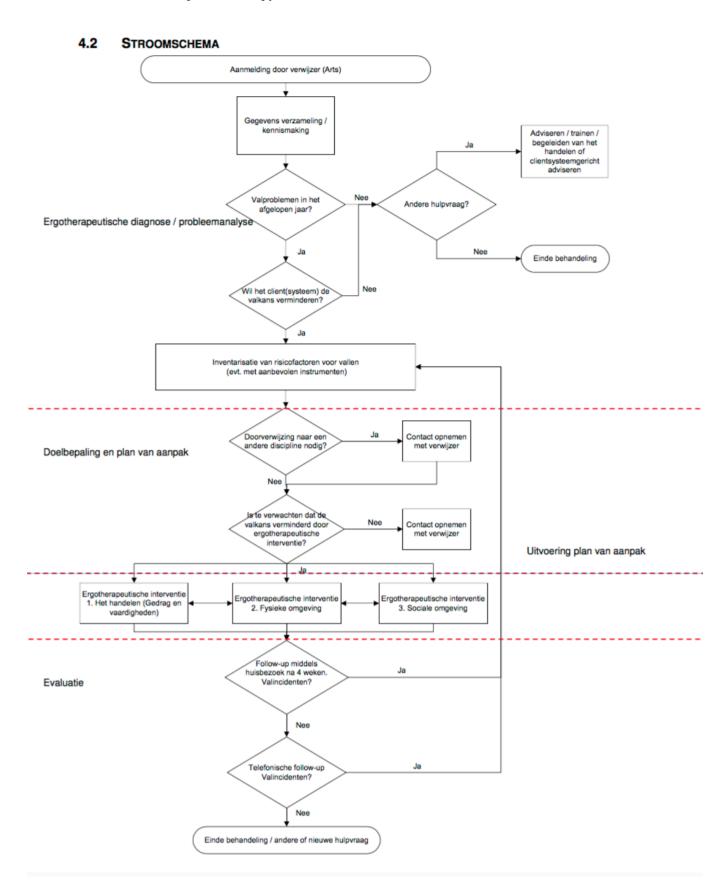
Algoritme voor opsporing van val- en valletselrisico

Flowchart for identifying fall risk from the guideline "prevention of fall incidents in elderly" developed by the Dutch Society for Clinical Geriatrics.

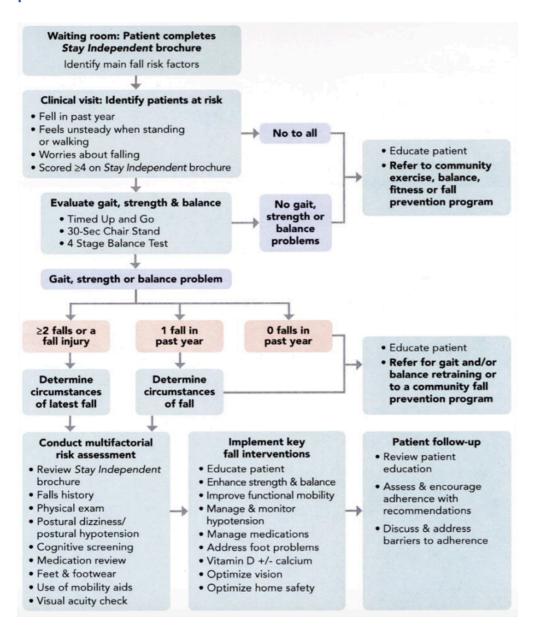
Contact naar aanleiding van een valincident of valletsel Gevallen in afgelopen jaar? Herhaald vallen Eenmalige val Mobiliteitsstoornis Fractuurrisico Syncope Aanwijsbare oorzaak Nee Evaluatie valrisico Geen verdere actie

60

Flowchart from the guideline "the occupational therapy guideline fall prevention" developed by the Dutch Association of Occupation Therapy.



Appendix 4: The STEADI tool kit: a fall prevention resource for healthcare providers.



Appendix 5: Interview guides

Interview guide for community organizations (home care organizations, district nurses, welfare organizations)

Introductie

Goedemorgen/middag, ik ben Shanna Ferdinandus en ik zou vandaag graag een interview met u willen houden over een keten aanpak voor valpreventie. Ik zal eerst beginnen met kort iets over mezelf te vertellen. Ik ben een tweedejaars masterstudente Management, Policy Analysis & Entrepreneurship in the Health & Life Sciences aan de Vrije Universiteit. Momenteel loop ik stage bij de GGD, waarbij ik me richt op de bevorderende en belemmerende factoren voor het inzetten van een keten aanpak voor valpreventie. Onder keten aanpak voor valpreventie verstaan wij het hele proces van signaleren en screenen van kwetsbare ouderen, vervolgens het doorverwijzen van ouderen naar preventie aanbod of naar professionals in de eerstelijns. Vervolgens moeten deze professionals een val-risicoanalyse doen of behandeling geven en vervolgens ook weer doorverwijzen naar preventie aanbod. Met mijn onderzoek hoop ik aanbevelingen te kunnen maken aan de gemeente en GGD HM over welke factoren een rol spelen bij het inzetten van een keten aanpak voor valpreventie en hoe dit bewerkstelligt kan worden. Aangezien u nauw betrokken bent bij kwetsbare ouderen, zou ik graag u mening horen. Het interview zal ongeveer 30 tot 60 minuten duren. Verder zou ik u toestemming willen vragen om dit interview op te nemen met een recorder, voor de data-analyse. De data zal anoniem verwerkt worden. Ten slotte wil ik u meegeven dat er geen juiste of onjuiste antwoorden zijn, ik ben vooral geïnteresseerd in uw mening.

Algemene vragen

- 1. Kunt u wat vertellen over het werk dat u doet?
- 2. Op wat voor manier komt u in contact met ouderen die risico lopen om te vallen?
- 3. Vindt u val preventie belangrijk?
 - Zo ja, waarom?
- 4. Op wat voor manier bent u al bezig om vallen onder ouderen te voorkomen in uw dagelijks werk?
- 5. Hoe kijkt u aan tegen een integrale aanpak voor valpreventie? Eens met conceptueel model?

Concept vragen

Signaleren en screenen van ouderen die risico lopen om te vallen

- 6. Op wat voor manier signaleert en screent u ouderen met risico op vallen?
- 7. Als u ouderen met een risico op vallen signaleert en screent, wat doet u dan?

- 8. Als u ouderen doorverwijst/zou willen doorverwijzen naar preventie interventies voor vallen of naar een professional in de eerstelijns, ondervindt u dan daarin belemmerende factoren op het gebied van financiering dat doorverwijzen niet mogelijk maakt?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die op het gebied van financiering bevorderend zouden werken?
- 9. Als u ouderen doorverwijst/zou willen doorverwijzen naar preventie interventies voor vallen of naar een professional in de eerstelijns, ondervindt u dan belemmeringen in de manier waarop de regelgeving en administratieve functies zijn gestructureerd die het doorverwijzen niet mogelijk maken?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die op het gebied regelgeving of administratieve functies bevorderend zouden werken?
- 10. Als u ouderen doorverwijst/zou willen doorverwijzen naar preventie interventies voor vallen of naar een professional in de eerstelijns, ondervindt u dan daarin barrières op het gebied van samenwerken en de relatie die u heeft met andere organisaties, wat het doorverwijzen moeilijk maakt?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die de samenwerking en de relatie tussen organisaties die zich bezighouden met val preventie zouden kunnen bevorderen?
- 11. Als u ouderen doorverwijst/zou willen doorverwijzen naar preventie interventies voor vallen of naar een professional in de eerstelijns, vindt u dan dat andere professionals hun verantwoordelijkheid nemen? Wie moet de verantwoordelijkheid nemen?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die de verantwoordelijkheid nemen m.b.t. valpreventie zouden kunnen bevorderen?

- 12. Ervaart u belemmeringen in het samenwerken met andere zorg professionals rondom de zorg voor valpreventie?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die de samenwerking met andere zorg professionals zouden kunnen bevorderen?
- 13. Ervaart u belemmeringen in de manier waarop u getraind bent rondom de zorg voor valpreventie?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die de samenwerking met andere zorg professionals zouden kunnen bevorderen?
- 14. Ervaart u belemmeringen in het begrijpen van de behoeften van de patiënt?

Afsluitende vragen

Ik denk dat we zo alle onderwerpen met betrekking tot het inzetten van een integrale aanpak voor valpreventie hebben besproken.

- 16. Wilt u nog iets toevoegen met betrekking tot dit onderwerp?
- 17. Zijn er bepaalde aspecten die u extra belangrijk vindt?
- 18. Heeft u nog algemene vragen?

Afsluiting

- Participant bedanken voor tijd en deelname
- Benadrukken dat de data anoniem verwerkt zal worden en vragen of de participant een samenvatting van het interview wenst.

Interview guide for health care professionals in primary care (general practitioners and physiotherapists)

Introductie

Goedemorgen/middag, ik ben Shanna Ferdinandus en ik zou vandaag graag een interview met u willen houden over een keten aanpak voor valpreventie. Ik zal eerst beginnen met kort iets over mezelf te vertellen. Ik ben een tweedejaars masterstudente Management, Policy Analysis & Entrepreneurship in the Health & Life Sciences aan de Vrije Universiteit. Momenteel loop ik stage bij de GGD, waarbij ik me richt op de bevorderende en belemmerende factoren voor het inzetten van een keten aanpak voor valpreventie. Onder keten aanpak voor valpreventie verstaan wij het hele proces van signaleren en screenen van kwetsbare ouderen, vervolgens het doorverwijzen van ouderen naar preventie aanbod of naar professionals in de eerstelijns. Vervolgens moeten deze professionals een valrisicoanalyse doen of behandeling geven en vervolgens ook weer doorverwijzen naar preventie aanbod. Met mijn onderzoek hoop ik aanbevelingen te kunnen maken aan de gemeente en GGD HM over welke factoren een rol spelen bij het inzetten van een keten aanpak voor valpreventie en hoe dit bewerkstelligt kan worden. Aangezien u nauw betrokken bent bij kwetsbare ouderen, zou ik graag u mening horen. Het interview zal ongeveer 30 tot 60 minuten duren. Verder zou ik u toestemming willen vragen om dit interview op te nemen met een recorder, voor de data-analyse. De data zal anoniem verwerkt worden. Ten slotte wil ik u meegeven dat er geen juiste of onjuiste antwoorden zijn, ik ben vooral geïnteresseerd in uw mening.

Algemene vragen

- 1. Kunt u wat vertellen over het werk dat u doet?
- 2. Op wat voor manier komt u in contact met ouderen die risico lopen om te vallen?
- 3. Vindt u val preventie belangrijk?
 - Zo ja, waarom?
- 4. Op wat voor manier bent u al bezig om vallen onder ouderen te voorkomen in uw dagelijks werk?
- 5. Hoe kijkt u aan tegen een integrale aanpak voor valpreventie? Eens met conceptueel model?

Concept vragen

Signaleren en screenen van ouderen die risico lopen om te vallen

- 3. Op wat voor manier signaleert en screent u ouderen met risico op vallen?
- 4. Als u ouderen met een risico op vallen signaleert en screent, wat doet u dan?

Risk assessment en behandeling

- 5. Als u bij ouderen een risk assessment of behandeling wilt uitvoeren op basis van verhoogd risico, ondervindt u dan daarin belemmerende factoren op het gebied van financiering dat dit niet mogelijk maakt?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die op het gebied van financiering bevorderend zouden werken?
- 6. Als u bij ouderen een risk assessment of behandeling wilt uitvoeren op basis van verhoogd risico, ondervindt u dan daar belemmeringen in de manier waarop de regelgeving en administratieve functies zijn gestructureerd die dit niet mogelijk maken?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die op het gebied van regelgeving of administratieve functies bevorderend zouden werken?
- 7. Als u bij ouderen een risk assessment of behandeling wilt uitvoeren op basis van verhoogd risico ondervindt u dan daarin barrières op het gebied van samenwerken en de relatie die u heeft met andere organisaties, wat dit moeilijk maakt?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die de samenwerking en de relatie tussen organisaties die zich bezighouden met val preventie zouden kunnen bevorderen?
- 8. Als u bij ouderen een risk assessment of behandeling wilt uitvoeren op basis van verhoogd risico, vindt u dan dat andere professionals hun verantwoordelijkheid nemen?
 - Welke belemmeringen zijn dit?
 - Waarom is dit een belemmering?
 - Hoe kan dit opgelost worden in uw ogen?
 - Zijn er ook factoren die de verantwoordelijkheid m.b.t. valpreventie zouden kunnen bevorderen?

9. Ervaart u belemmeringen in het samenwerken met andere professionals/instellingen rondom de zorg voor valpreventie?

- Welke belemmeringen zijn dit?
- Waarom is dit een belemmering?
- Hoe kan dit opgelost worden in uw ogen?
- Zijn er ook factoren die de samenwerking en de relatie tussen organisaties die zich bezighouden met val preventie zouden kunnen bevorderen?
- 10. Welke belemmerende en bevorderende factoren ervaart u bij verwijzen van ouderen naar preventie interventies?
 - Financiering
 - Administratie
 - Organisatie
 - Service delivery
 - Klinische belemmeringen

Afsluitende vragen

Ik denk dat we zo alle onderwerpen met betrekking tot het inzetten van een integrale aanpak voor valpreventie hebben besproken.

- 12. Wilt u nog iets toevoegen met betrekking tot dit onderwerp?
- 13. Zijn er bepaalde aspecten die u extra belangrijk vindt?
- 14. Heeft u nog algemene vragen?

Afsluiting

- Participant bedanken voor tijd en deelname
- Benadrukken dat de data anoniem verwerkt zal worden en vragen of de participant een samenvatting van het interview wenst.

Interview guide for municipalities and health insurance company

Introductie

Goedemorgen/middag, ik ben Shanna Ferdinandus en ik zou u vandaag graag willen interviewen over de mogelijkheden voor een ketenaanpak voor valpreventie. Ik zal eerst beginnen met kort iets over mezelf te vertellen. Ik zit in het laatste jaar van mijn masterstudie Management, Policy Analysis & Entrepreneurship in the Health & Life Sciences aan de Vrije Universiteit. Momenteel loop ik stage bij de GGD, waarbij ik me richt op de bevorderende en belemmerende factoren voor het mogelijk inzetten van een ketenaanpak voor valpreventie. Onder ketenaanpak voor valpreventie verstaan wij het hele proces van signaleren en screenen van kwetsbare ouderen, gevolgd door het doorverwijzen van ouderen naar preventie aanbod of naar professionals in de eerstelijn. Vervolgens kunnen deze professionals een valrisicoanalyse doen of behandeling geven en vervolgens ook weer doorverwijzen naar preventie aanbod. Met mijn onderzoek hoop ik aanbevelingen te kunnen geven aan de gemeente en GGD HM over welke factoren een rol spelen bij het inzetten van een ketenaanpak voor valpreventie en hoe dit bewerkstelligd kan worden. Aangezien u nauw betrokken bent bij kwetsbare ouderen, zou ik graag uw mening horen. Het interview zal ongeveer 30 tot 60 minuten duren. Verder zou ik uw toestemming willen vragen om dit interview op te nemen met een recorder, voor de dataanalyse. De data zal anoniem verwerkt worden. Ten slotte wil ik u meegeven dat er geen juiste of onjuiste antwoorden zijn, ik ben vooral geïnteresseerd in uw mening.

Algemene vragen

- 1. Wat is uw functie bij de gemeente?
- 2. Vindt u valpreventie een belangrijk onderdeel van uw werk?
 - Zo ja, waarom? Zo nee, waarom niet?
- 3. Houden mensen binnen de gemeente zich bezig met valpreventie? Op wat voor manier doen zij dit?
- 4. Hoe kijkt u aan tegen een ketenaanpak voor valpreventie? Hoe ziet in uw ogen een ideale ketenaanpak voor valpreventie eruit? Eens met conceptueel model?

Concept vragen

- 5. Wat kan een gemeente doen om elke stap in de keten te realiseren of te ondersteunen? Wat kan jij doen om elke stap in de keten te realiseren of te ondersteunen?
- Wat is hiervoor nodig?

Mijn onderzoek richt zich op 5 barrières die mogelijk een rol spelen bij een ketenaanpak. Dit zijn: financiële, administratieve, organisatorische, dienstverlenende en klinische barrières.

- 6. Bij een ketenaanpak is administratie en registratie een belangrijk onderdeel. Het is belangrijk dat de verschillende professionals elkaars administratie in kunnen zien en kunnen zien hoe doorverwijzen van thuiszorg naar huisarts gebeurt en doorverwijzing naar preventie aanbod. Op het gebied van administratie, wat denkt u dat dan moet gebeuren om deze keten van valpreventie te laten verlopen?
- Welke rol zou u hierin kunnen spelen?
- 7. Wat denkt u dat moet gebeuren om de samenwerking tussen verschillende organisaties beter te laten verlopen?
- Welke rol zou u/de gemeente hierin kunnen spelen?
- 8. De keten die ik u zojuist heb laten zien gaat ervanuit dat alle professionals die in aanraking komen met kwetsbare ouderen deze ook moeten screenen op vallen en hierin hun verantwoordelijkheid moeten nemen. Dit betekent dat ze hierin getraind moeten zijn en samen moeten werken met anderen. Wat denkt u dat moet gebeuren op dit gebied om deze keten van valpreventie beter te laten verlopen?
- Welke rol zou u/de gemeente hierin kunnen spelen?
- 9. Welke informatie heeft de gemeente nodig van de huisarts om te weten welke hulp er ingezet moet worden voor diagnosestellingen? Hoe moet die terugkoppeling?
- Welke rol zou u/de gemeente hierin kunnen spelen om dit te realiseren?
- 10. Alles om valpreventie heen kost geld, zowel bij de voorkant van de keten bij het screenen als bij de achterkant van de keten bij de preventie interventies. Waar is in uw ogen geld nodig om valpreventie succesvol te laten verlopen?
- Welke rol zou u/de gemeente hierin kunnen spelen?

Afsluitende vragen

We hebben veel besproken tijdens dit interview.

- 11. Wilt u nog iets toevoegen met betrekking tot dit onderwerp?
- 12. Zijn er bepaalde aspecten die u extra belangrijk vindt?
- 13. Heeft u nog algemene vragen?

Afsluiting

- Participant bedanken voor tijd en deelname
- Benadrukken dat de data anoniem verwerkt zal worden en vragen of de participant een samenvatting van het interview wenst.