

Designing better moves: improving senior mobility with assisted living

Evidence-based insights for the Dutch free rental housing market

Master of Science Thesis Presentation

Faculty of Applied Sciences
MSc Architecture, Urbanism & Building Sciences
Management in the Built Environment (MBE)
D.L. Buijs
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Programme

08:45 Preparation
09:00 Presentation
09:30 Questions & discussion
09:45 Appraisal & feedback
10:00 End

TU Delft thesis committee

1st mentor: Prof. Dr. Ir. M.G. (Marja) Elsinga
2nd mentor: Dr. H.J.F.M. (Harry) Boumeester
Member of the board: Ir. J.H. (Joris) Lüchinger

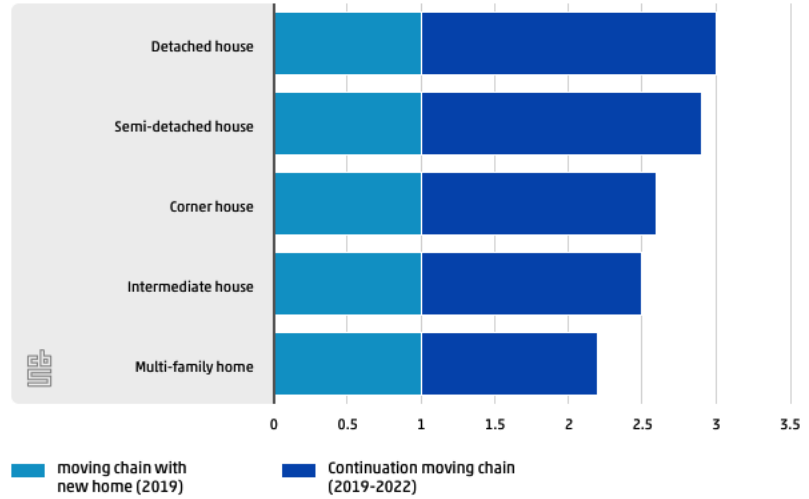
Amvest

1st supervisor: Drs. B. (Bart) Louw
2nd supervisor: J. (Jeffrey) Boerebach





Average length of moving chains of new homes, 2019-2022Start

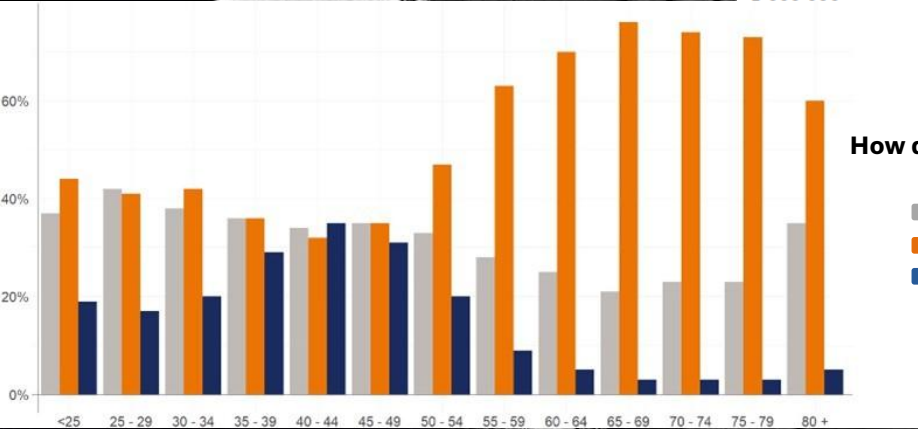


Number of p

moving chain with new home (2019)

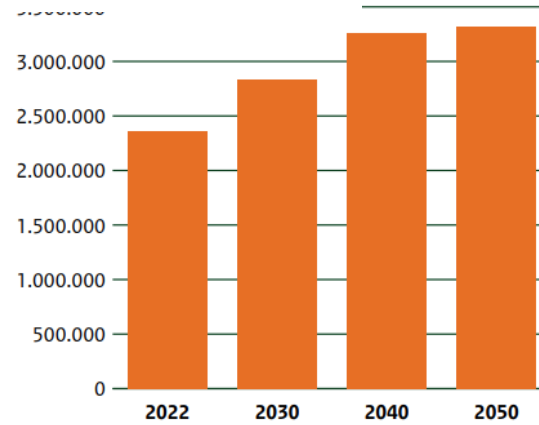
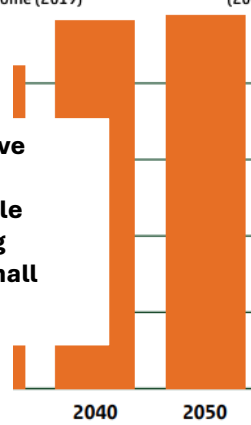
Continuation moving chain (2019-2022)

- NL



How do they live

- Suitable
- Too big
- Too small



Research objective

To develop evidence-based strategies that can improve senior relocation in the Dutch free rental market by using insights into **push**, **pull**, and **keep factors**.



Push, Pull & Keep factors



Evidence based strategies

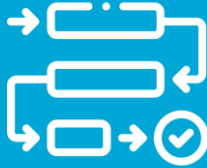
Presentation structure



Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion

Starting point – 3 domains



Context



Push, Pull
& Keep



Methodology



Results



Strategies



Conclusion



Housing

Mismatch between stock – needs

55% unsuitable housing

Demand for future proveness

Community focussed housing



Social

Social isolation impacts health & QOL

Many seniors alone + weak social ties

Homes combine community & interaction



Health(care)

Institutional care to ageing in place

Isolation = major health risk

Less care workers

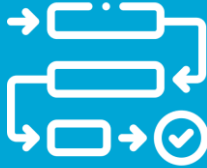
Homes combine independence + care



Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion

Behavioural model of elderly migration (Wiseman, 1980):



Context



Push, Pull
& Keep



Methodology



Results



Strategies



Conclusion



1. Unsafe home environment
2. lack of accessibility adaptations
3. High Maintenance house
4. Worsening health
5. Post retirement changing needs

1. Age friendly housing
2. Homeownership stability
3. Downsizing for financial ease

1. Emotional attachment to home
2. Financial stability of homeownership
3. Home modifications instead of moving

1. Major life transitions
2. Widowhood
3. Social isolation (after fall)
4. Neighbourhood changes

1. Stronger social connections
2. Proximity to family
3. Alignment with personal values

1. Established social ties
2. Family proximity
3. Fear of social isolation
4. Resistance to change

1. Declining health
2. Fear of falls
3. Lack of nearby caregivers
4. Fear of future dependency

1. Access to high-quality healthcare
2. Assisted living communities

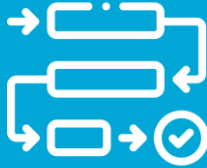
1. Healthcare continuity
2. Confidence in managing health at home
3. Preference for aging in place
4. Stability for cognitive impairments



Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion



Context

Research questions



Push, Pull
& Keep

How can insights into push, pull and keep factors be used to optimise relocation strategies for seniors in the free rental market and enhance their assisted living experiences?



Methodology

1. What are the primary push, pull, and keep factors influencing seniors' relocation decisions within the free rental market for assisted living in The Netherlands?
2. How do seniors perceive their transition into assisted living, and to what extent does their experience align with their expectations?
3. How do push, pull, and keep factors shape the motivations and experiences of seniors across different housing decisions – comparing those who have relocated to assisted living and those who choose differently.



Results



Strategies



Conclusion

Multi-method qualitative research methodology



Context



Push, Pull
& Keep



Methodology



Results

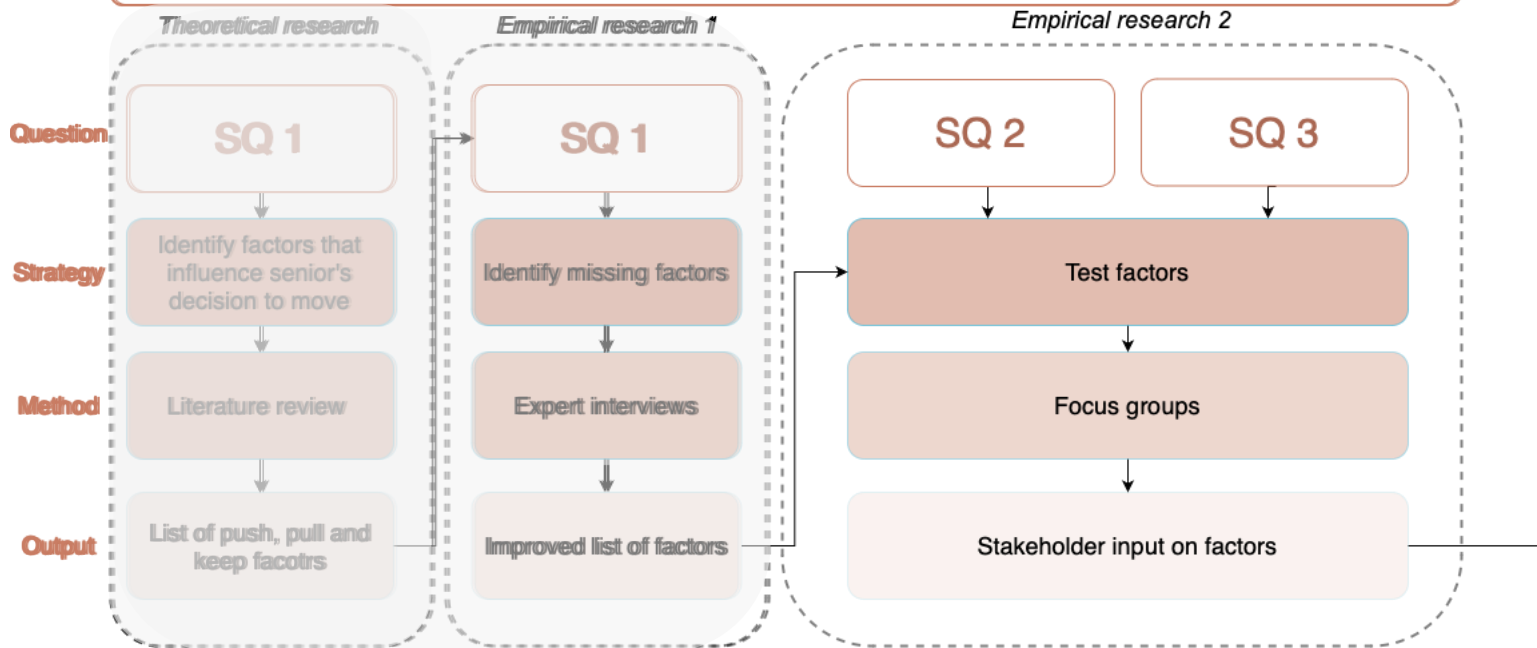


Strategies



Conclusion

How can insights into push, pull and keep factors be used to optimize relocation strategies for seniors in the free rental market and enhance their assisted living experiences?



Qualitative research methods



Context



Push, Pull
& Keep



Methodology



Results



Strategies



Conclusion



Expert interviews

Search for new factors
Validate factors found in literature

Participant	Sector/organisation
Expert 1	Municipality
Expert 2	Institutional investor
Expert 3	Senior living service
Expert 4	Senior living consultancy
Expert 5	Real Estate Development



Focus groups

Include lived experiences
Search for new factors
Validate factors found in literature & interviews

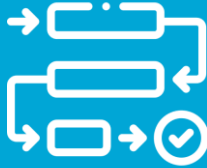
Group	Description
1	Current tenants (Soesterberg)
2	Current tenants (Amsterdam)
3	Non-movers



Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion



Takeaways from interviews



 Context

 Push, Pull & Keep

 Methodology

 Results

 Strategies

 Conclusion

1. -

1. Distance/develop close by
2. facilities
3. Inclusive product

1. Lack of examples
2. Hassle (of moving)

1. -

1. Communication
2. Change in mindset
3. Meeting possibilities

1. Pride & ego

1. -

1. -

1. -



Housing



Social



Health(care)

- Relocation is emotional
- Local projects
- Diverse needs so demand for diverse housing
- Hassle holds people back
- Lack of projects

- Framing matters
- Design to connect
- Mindset delays action

- Proactive planning is rare
- Care should stay in the background



Takeaways from focus group



 Context

 Push, Pull & Keep

 Methodology

 Results

 Strategies

 Conclusion



1. -

1. -

1. "Presorting"



1. Try out construction

1. -

1. -



Housing

- Relocation is emotional
- Proactive planning is possible
- Mismatch between needs and supply
- Lack of relatable projects



Social

- Framing matters
- Social identity shapes decision
- Desire for informal contact
- Participation improves trust
- Assisted living is still bit abstract



Health(care)

- Decline drives action (if felt)
- Preference for independence is strong
- Health messaging needs to be subtle



Senior ranking – Push factors



Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion



1. Relocated Soesterberg

1. Worsening health
2. High Maintenance house
3. Neighbourhood changes
4. Lack of nearby caregivers
5. Fear of future dependency



2. Relocated Amsterdam

1. Major life transitions
2. Widowhood
3. Fear of future dependency
4. High Maintenance house



3. Non-movers

1. Major life transitions
2. Post retirement changing needs
3. Widowhood
4. Fear of future dependency
5. High maintenance house

Domains: Housing – Social – Health(care)

Worsening health, **fear of future dependency**, and **high maintenance housing** appeared across all groups

Widowhood was strong among urban and non-movers as a (potential) trigger for re-evaluation

Post retirement changing needs only by non-movers, starting point for reflection not necessarily action

Major life transitions top of the ranking of group 2 and 3, they need external triggers before relocation

Lack of nearby care givers was only ranked by Soesterberg group, reinforcing their proactive approach



Senior ranking – Pull factors



Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion



Relocated 1
Soesterberg

1. Meeting possibilities (exp)
2. Facilities
3. Age friendly housing
4. Assisted living communities
5. Proximity to family



Relocated 2
Amsterdam

1. Meeting possibilities (exp)
2. Proximity to family
3. Facilities
4. Age friendly housing



Non-movers 2a

1. Facilities
2. Age friendly housing
3. Stronger social connections
4. Downsizing for financial ease
5. Change in mindset

Domains: Housing – Social – Health(care)

Age-friendly housing and **facilities** were ranked by all groups, confirming their broad appeal and the importance of shared, accessible spaces.

Meeting possibilities ranked highest among both relocation groups, showing that it is an important factor

Proximity to family was important for movers but absent among non-movers

Downsizing and **mindset shift** only appeared among non-movers, they need to get used to the idea

Assisted living that creates independence with nearby support is interesting for group 1



Senior ranking – Keep factors



Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion



Relocated 1
Soesterberg

1. Lack of participial design (fg)
2. Pride/ego (exp)
3. Resistance to change
4. Fear of social isolation
5. Confidence in managing health at home



Relocated 2
Amsterdam

1. Established social ties
2. Emotional attachment to home



Non-movers 2a

1. Family proximity
2. Established social ties
3. Pride/ego (exp)
4. Resistance to change
5. Emotional attachment to home

Domains: Housing – Social – Health(care)

Resistance to change was ranked by movers and non-movers, making it a barrier that can be overcome

Pride and ego was only ranked by groups 1 and 3, suggesting it's tied more to homeownership identity

Confidence in managing health at home reinforces why some seniors delay action - they still see themselves as self-reliant.

Lack of participial design was ranked by Soesterberg movers, revealing that even relocated seniors feel overlooked in concept delivery

Emotional attachment to home was ranked by both non-movers and the Amsterdam group, showing that emotional bonds to place are a strong



Senior ranking – Final takeaways



Context



Push, Pull
& Keep



Methodology



Results



Strategies



Conclusion

Push factors are shared, but urgency differs

- All groups cite health and housing strain, but **only movers act on them early**.

Pull factors reflect lifestyle and context

- Shared desires like **facilities** and **age-friendly housing** are universal.
- **urban movers value aesthetics and social life**.

Keep factors weigh heavier on non-movers

- Emotional ties, pride, and fear of change **strongly delay action**.
- **Urban movers named fewer keep factors**, suggesting more openness.

Movers validate their decisions after relocating

- **Meeting possibilities** and new routines confirmed the benefits post-move.

Same factors, different perceptions

- The **difference lies in mindset and timing**, not in circumstance.



Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion

Final table of factors



1. High Maintenance house
2. Worsening health
3. Unsafe home environment
4. Post retirement changing needs
5. lack of accessibility adaptations

1. Downsizing for financial ease
2. Facilities
3. **Try out construction (fg)**
4. Age friendly housing
5. **Inclusive product (exp)**
6. **Distance- development close by (exp)**
7. Homeownership stability

1. **Lack of participial design (fg)**
2. **Lack of examples (exp)**
3. Emotional attachment to home
4. **Hassle/moving (exp)**
5. **product just not attractive (fg)**
6. Home modifications instead of moving
7. Financial stability of homeownership

1. Neighbourhood changes
2. Major life transitions
3. Social isolation (after fall)
4. Widowhood

1. Stronger social connections
2. **communication/participation (exp)**
3. Proximity to family
4. **Change in mindset (exp)**
5. **Meeting possibilities (exp)**
6. Alignment with personal values

1. Resistance to change
2. Established social ties
3. **Pride/ego (exp)**
4. Fear of social isolation
5. Family proximity

1. Fear of future dependency
2. **"Forsiting" (fg)**
3. Declining health
4. Lack of nearby caregivers
5. Fear of falls

1. Assisted living communities
2. Access to high-quality healthcare

1. Confidence in managing health at home
2. Preference for aging in place
3. Healthcare continuity
4. Stability for cognitive impairments

Domains: **Housing** – Social – Health(care)

-  Context
-  Push, Pull & Keep
-  Methodology
-  Results
-  Strategies
-  Conclusion





Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion

Strategies by senior type



All seniors

- Deliver on promises and respond to complaints
- Treat relocation as the start of a relationship
- Design for spontaneous social interaction
- Respect status and pride around housing careers



Seniors open to move

- Increase visibility though
- simplify digital and financial barriers
- Offer relocation support service



Hesitant seniors

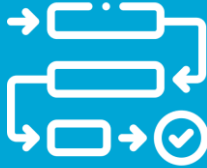
- Use trial stays
- Reframe assisted living as lifestyle-oriented
- Promote early dialogue about the future



Context



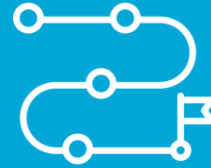
Push, Pull & Keep



Methodology



Results



Strategies



Conclusion



Context



Push, Pull
& Keep



Methodology



Results



Strategies



Conclusion

Conclusions

This thesis:

combined **literature, interviews, and focus groups**

Explored senior relocation through **Push, Pull, and Keep** framework

Identified differences between **movers** and **non-movers**

SQ1: Key factors

Relocation is a dynamic balance of the factors

Success lies in reducing keep factors, while emphasizing pull factors

Context matters: urban vs rural seniors value different things

SQ2: Expectations vs. Experiences

Fear of losing autonomy unfounded after relocation

Gaps between promise and delivery hurt satisfaction

Trust and contact are needed for long-term success



Context



Push, Pull
& Keep



Methodology



Results



Strategies



Conclusion

Conclusions

SQ3: movers vs. non-movers

Theme	1. Relocated – Soesterberg	2. Relocated - Amsterdam	3. Non-movers
Mindset	Future-oriented	Future oriented	Present-focused
Triggers	Proactive (house+health)	Life changes	Delayed (life events)
Framing	Practical	mix	Emotional
Barriers	Hassle	hassle	Pride, uncertainty
Identity	Embraced change	Looking for new opportunities	Feared decline

Main RQ: Optimised relocation strategy

Understand **how open** seniors are to relocation

Implement **communication, support** and **timing** to their mindset

Offer practical help and reduce the emotional barriers to act

What we now know:

1. Mindset shapes action, Not just health or housing situation
2. Emotional and social ties are powerful keep factors
3. Communication shapes appeal
4. There is no single "type" of senior

Limitations, recommendations & future work



Context



Push, Pull
& Keep



Methodology



Results



Strategies



Conclusion



Narrow participant pool
Small sample size of non-movers
Urban bias
Mid/high-income focus



Include senior voices
Design beyond the house
Reframe relocation
Enable participation



Use a longitudinal research design to track how factors evolve over time
Explore income differences and different types of ownerships

Thank you for your attention



Time for questions and discussion



Findings from expert interviews – Push factors



Context



Push, Pull & Keep



Methodology



Results



Strategies



Conclusion



Housing

High-maintenance homes create both physical and mental burden

"That house is getting too big, maintenance is becoming too much."— Expert 4

Post-retirement prompts housing re-evaluation

"I think it's always a good time [to relocate] when you retire."— Expert 2



Social

Life transitions (empty nest, widowhood) disrupt stability

"The kids are out... we're moving to something smaller and easier."— Expert 5

Widowhood destabilizes the home environment

"Especially if one of them drops out... they kept each other balanced."— Expert 4

Neighbourhood change reduces social connection

"Only young people left, no one has time anymore."— Expert 4

Sudden health issues shift thinking from optional to urgent

"You go from wanting to move to needing to."— Expert 5



Health(care)

Fear of future decline motivates early decisions

"People realise... one day the hour comes, and then it's too late."— Expert 3

Hospitalisations spark awareness and reflection

"How long were you in hospital? Six months... and how did you come out?"— Expert 3



Findings from interviews – Pull factors



Context



Push, Pull
& Keep



Methodology



Results



Strategies



Conclusion



Housing

Age-friendly housing supports ageing with dignity through accessible layouts and adaptable design
"That's just life-proof housing... with a few minor adjustments." — Expert 4

Downsizing for financial ease allows seniors to unlock home equity, improve quality of life, or support family
"You release your money... the house has increased in value." — Expert 5



Social

Proximity to family enables emotional closeness and practical caregiving support
"They really want to... move to where their children live." — Expert 2

Stronger social connections attract seniors to vibrant communities where they can stay active and avoid loneliness
"Where do you have your social network, or where can you stay busy?" — Expert 5



Health(care)

Access to high-quality healthcare provides reassurance that care is available when needed
"The most important thing is the certainty that care is always available." — Expert 1

Assisted living communities offer autonomy with built-in support, blending care and social engagement
"Housing concepts where people look after each other." — Expert 4



Findings from interviews – Keep factors



Context



Push, Pull
& Keep



Methodology



Results



Strategies



Conclusion



Housing

Emotional attachment to home makes seniors reluctant to leave

"They've lived in a house for 40, 50 years... the life is in the house and they struggle with shedding it." — Expert 3

Financial stability of homeownership discourages moving due to fear of higher rental costs and losing a paid-off home

"I had my house free... and now suddenly I have to start having more charges. How can that be?" — Expert 5

Home modifications instead of moving provide a way to adapt the current home rather than relocate

"I will stay in my own home and remodel it... and remain self-sufficient." — Expert 1



Social

Established social ties provide comfort, identity, and routine, often outweighing housing discomfort

"This is where I have my social contacts." — Expert 5

Resistance to change makes seniors view relocation as disruptive and emotionally unsettling

"Away from the neighbour you know, away from the GP... from what you're used to." — Expert 1

Confidence in managing health at home makes seniors feel capable and reduces urgency to relocate

"They're not frail, never going to be... they can handle it completely fine by themselves." — Expert 3



Health(care)

Preference for ageing in place reflects autonomy, pride, and a sense of control

"I can still manage in the house where my children were born." — Expert 1

Code document digram

	1 Hans Adriani - I...	2 Interview - Da...	3 Interview - Fie...	4 Interview - Jea...	5 Interview - Lar...	Totals
	87	84	99	106	96	
Gezondheid (zorg) - Ke... 2	2					2
Gezondheid (zorg) - Ke... 2	1			1		2
Gezondheid (zorg) - Ke... 5	2		2		1	5
Gezondheid (zorg) - Ke... 5	1		2		2	5
Gezondheid (zorg) - Pu... 41	11	11	5	9	5	41
Gezondheid (zorg) - Pu... 20	6	4	3	3	4	20
Gezondheid (zorg) - Pu... 10	3	1	3	1	2	10
Gezondheid (zorg) - Pu... 4	1	1	2			4
Gezondheid (zorg) - Pu... 6	1	1	4			6
Gezondheid (zorg) - Pu... 3	2				1	3
Sociaal - Keep: Angst v... 4				1	3	4
Sociaal - Keep: Gevesti... 11	2	3	3		3	11
Sociaal - Keep: Nabijhe... 4	1	1	1		1	4
Sociaal - Keep: trots/ego 3					3	3
Sociaal - Keep: Weerst... 15	5	1	6		3	15
Sociaal - Pull: Afstemm... 11	1		2	4	4	11
Sociaal - Pull: comunic... 54	10	4	19	10	11	54
Sociaal - Pull: Denkwijz... 51	7	8	13	11	12	51
Sociaal - Pull: Nabijhei... 11	1	2	6	2		11
Sociaal - Pull: Ontmoeti... 14		1	2	8	3	14
Sociaal - Pull: Sterkere... 21	6	6		6	3	21
Sociaal - Push: Grote le... 12	3	1	2	4	2	12
Sociaal - Push: Sociaal... 6		2	3	1		6
Sociaal - Push: Verand... 4		1		3		4
Sociaal - Push: Weduw... 5		1	1	3		5
Wonen - Keep: Emotion... 13	1	2	4	2	4	13
Wonen - Keep: Financi... 21	7	2	1	5	6	21
Wonen - Keep: gebrek... 35	6	10	5	6	8	35
Wonen - Keep: Gedoe 30	6	7	7	7	3	30
Wonen - Keep: Woning... 5	1	1	1	2		5
Wonen - Pull: afstand -... 19		6	9	1	3	19
Wonen - Pull: Downsizi... 18	3	5	2	5	3	18
Wonen - Pull: Inclusief... 13				8	5	13
Wonen - Pull: Leeftijds... 34	3	10	10	10	1	34
Wonen - Pull: Stabiel h... 4	1	2		1		4
Wonen - Pull: Voorzieni... 16			1	7	8	16
Wonen - Push: Gebrek... 5			2	3		5
Wonen - Push: Onderh... 9		1	3	3	2	9
Wonen - Push: Onveilig... 3			3			3
Wonen - Push: Verand... 9	3			3	3	9
Wonen - Push: Verslec... 6	1	1	2	2		6
Totals	98	96	129	132	109	564

Code document digram II

	1 Nieuwe-opnam...	2 focusgroep-II...	Totals
Gezondheid (zorg) - Keep: Vertrouwen in het beheren van de gezondheid t...	98	76	9
Gezondheid (zorg) - Keep: Voorkeur voor thuis ouder worden	3	1	3
Gezondheid (zorg) - Pull: Gemeenschappen voor begeleid wonen	9	2	9
Gezondheid (zorg) - Pull: Toegang tot hoogwaardige gezondheidszorg	1		1
Gezondheid (zorg) - Push: Afnemende gezondheid	3		3
Gezondheid (zorg) - Push: Angst voor toekomstige afhankelijkheid	5	1	5
Gezondheid (zorg) - Push: Gebrek aan zorgverleners in de buurt	2		2
Gezondheid (zorg) - Push: voorsorteren	5	1	5
Sociaal - Keep: Angst voor sociaal isolement	4		4
Sociaal - Keep: Gevestigde sociale banden	5	3	5
Sociaal - Keep: Nabijheid van familie	2	1	2
Sociaal - Keep: trots/ego	5	1	5
Sociaal - Keep: Weerstand tegen verandering	7	5	7
Sociaal - Pull: communicatie	7		7
Sociaal - Pull: Denkwijze verandering	6	4	6
Sociaal - Pull: Nabijheid tot familie	7		7
Sociaal - Pull: Ontmoeting	6	3	6
Sociaal - Pull: Sterkere sociale banden	10	3	10
Sociaal - Push: Grote levensovergangen	3	2	3
Sociaal - Push: Sociaal isolement na val	1		1
Sociaal - Push: Veranderingen in de buurt	6		6
Sociaal - Push: Weduwschap	1	1	1
Wonen - Keep: Emotionele gehechtheid aan thuis	2	2	2
Wonen - Keep: gebrek aan voorbeelden	6	4	6
Wonen - Keep: Gedoe	4	3	4
Wonen - Keep: product niet aantrekkelijk genoeg	4	4	4
Wonen - Keep: Woningaanpassingen in plaats van verhuizen	4	4	4
Wonen - Keep: woonervaring serieus nemen	11	1	11
Wonen - Pull: afstand - in de buurt ontwikkelen	1	1	1
Wonen - Pull: Downsizing voor financieel gemak	8	8	8
Wonen - Pull: Inclusief product	2		2
Wonen - Pull: Leefstijdsvriendelijk wonen	3	2	3
Wonen - Pull: onzekerheid of het bevalt	7	7	7
Wonen - Pull: Stabiel huiseigenaarschap	1	1	1
Wonen - Pull: Voorzieningen	8	3	8
Wonen - Push: Onderhoudsintensief huis	11	3	11
Wonen - Push: Onveilige thuisomgeving	1		1
Wonen - Push: Veranderende behoefte na pensioen	1		1
Wonen - Push: Verslechterende gezondheid	5	1	5