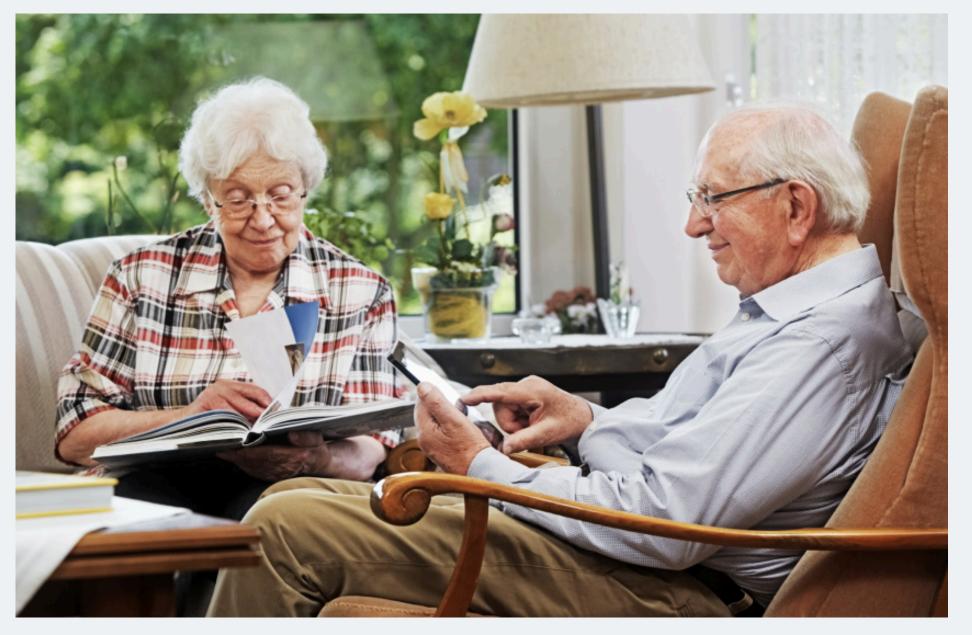
Repurposing real estate for the vital elderly An assessment framework for repurposing real estate to vital 65+ elderly homes.





Isabel de Bruijn 25-06-2025 P5 presentation

Housing crisis

Woningtekort weer opgelopen, ruim 400.000 huishoudens zoeken eigen plek

(NOS, 2024)



Hoe komt Nederland uit de woningmarktimpasse? 'Het tekort wordt alleen maar groter' Quotation Peter Boelhouwer (EW, 2024)

Housing demand VS supply in the Netherlands (Ministerie van Volkshuisvesting en Ruimtelijke Ordening, 2024)

Vacant real estate

- 20 mln m² residential functions (e.g. dwellings and nursing homes)
- 16 mln m²:
 - Offices
 - Shop
 - Commercial buildings
 - Churches
 - Sports halls
 - Schools & etc.
- Total: 36 mln m² (CBS, 2024)

Miljoenen m2 leegstand in Nederland: Hoe geven we dat een herbestemming?

(Change incl., 2023)



Illustration transformation to housing (Nicolas Journoud, 2021)

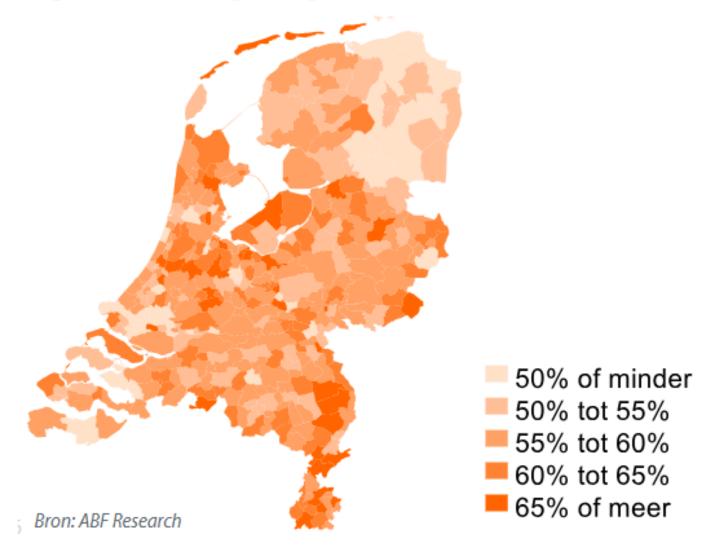
Aging population

- Growing elderly population
- Challenges in health care
- Aging in place
- Elderly often live in unsuitable housing



Percentual growth of the 65+ population in the Netherlands (HEVO, 2022)

Aandeel 65-plus huishoudens in een potentieel ongeschikte woning naar gemeente, 2021



RAPPORT REKENKAMER

Resultaten woonbeleid ouderen 'zorgelijk'

Het plan om ouderen langer thuis te laten wonen mislukt waarschijnlijk: er worden te weinig seniorenwoningen gebouwd. (NRC, 2025)

'Plan voor 290.000 nieuwe ouderenwoningen wordt niet gehaald'

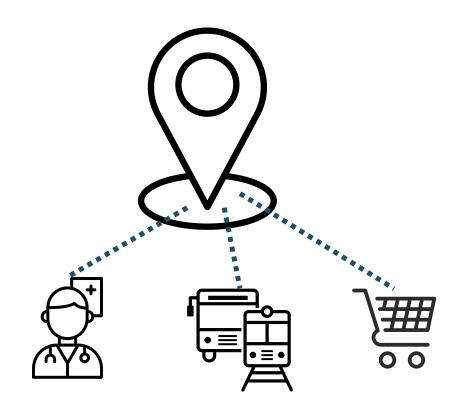
Seniorenhuisvesting Om ouderen langer thuis te laten wonen, moeten er honderdduizenden ouderenwoningen worden gebouwd. Dat gaat waarschijnlijk niet lukken, concludeert de Algemene Rekenkamer.

Oscar Vermeer

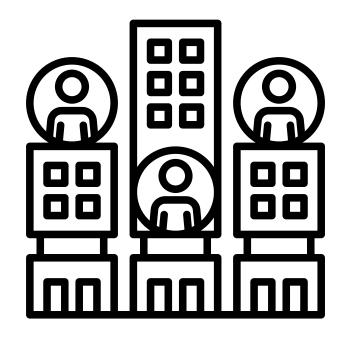
21 mei 2025 · Leestijd 2 minuten

(NRC, 2025)

Vacant real estate suitable for elderly?



Central locations



Clustering elderly (social)



Distribution of life cycle proof homes

Need for elderly living places that are adapted to their housing needs and preferences.



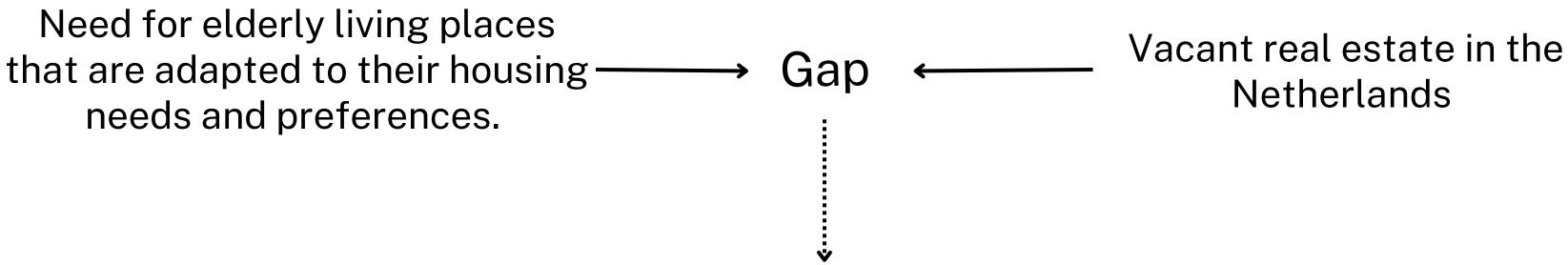
Need for elderly living places that are adapted to their housing needs and preferences.

Vacant real estate in the Netherlands

Need for elderly living places that are adapted to their housing ———— Gap ←——— Vacant real estate in the needs and preferences.

/

Stimulation of housing flow in the Netherlands



NIEUWS - WONE

Stimulation of housing flow in the Netherlands

NVM: 'Bouwen voor ouderen is de sleutel tot betere doorstroming op de woningmarkt'

(NVM, 2025)



Research question

"In what way can vacant real estate in the Netherlands be repurposed to meet the specific housing needs and preferences of the vital 65+ population?"



Introduction

Research question

"In what way can vacant real estate in the Netherlands be repurposed to meet the specific housing needs and preferences of the vital 65+ population?"

Sub-research questions

1. What are the key housing needs and preferences (on housing unit, building and location level) of the vital 65+ population in the Netherlands?

Discussion



Introduction

Research question

"In what way can vacant real estate in the Netherlands be repurposed to meet the specific housing needs and preferences of the vital 65+ population?"

Sub-research questions

- 1. What are the key **housing needs and preferences** (on housing unit, building and location level) of the vital 65+ population in the Netherlands?
- 2. What are the main barriers and opportunities to repurposing vacant real estate for elderly housing?



Research question

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Sub-research questions

- 1. What are the key **housing needs and preferences** (on housing unit, building and location level) of the vital 65+ population in the Netherlands?
- 2. What are the main barriers and opportunities to repurposing vacant real estate for elderly housing?
- 3. How to **overcome the barriers** when integrating the housing needs and preferences of the elderly?

Results



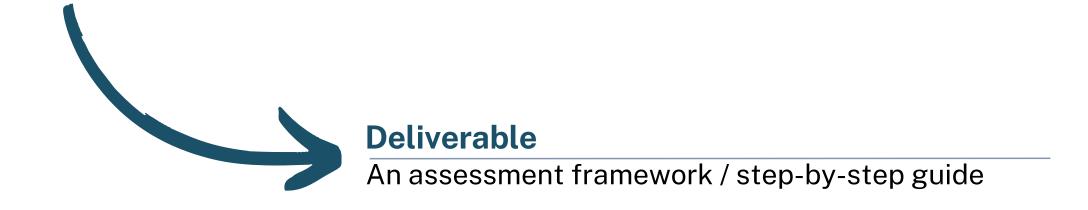
Introduction

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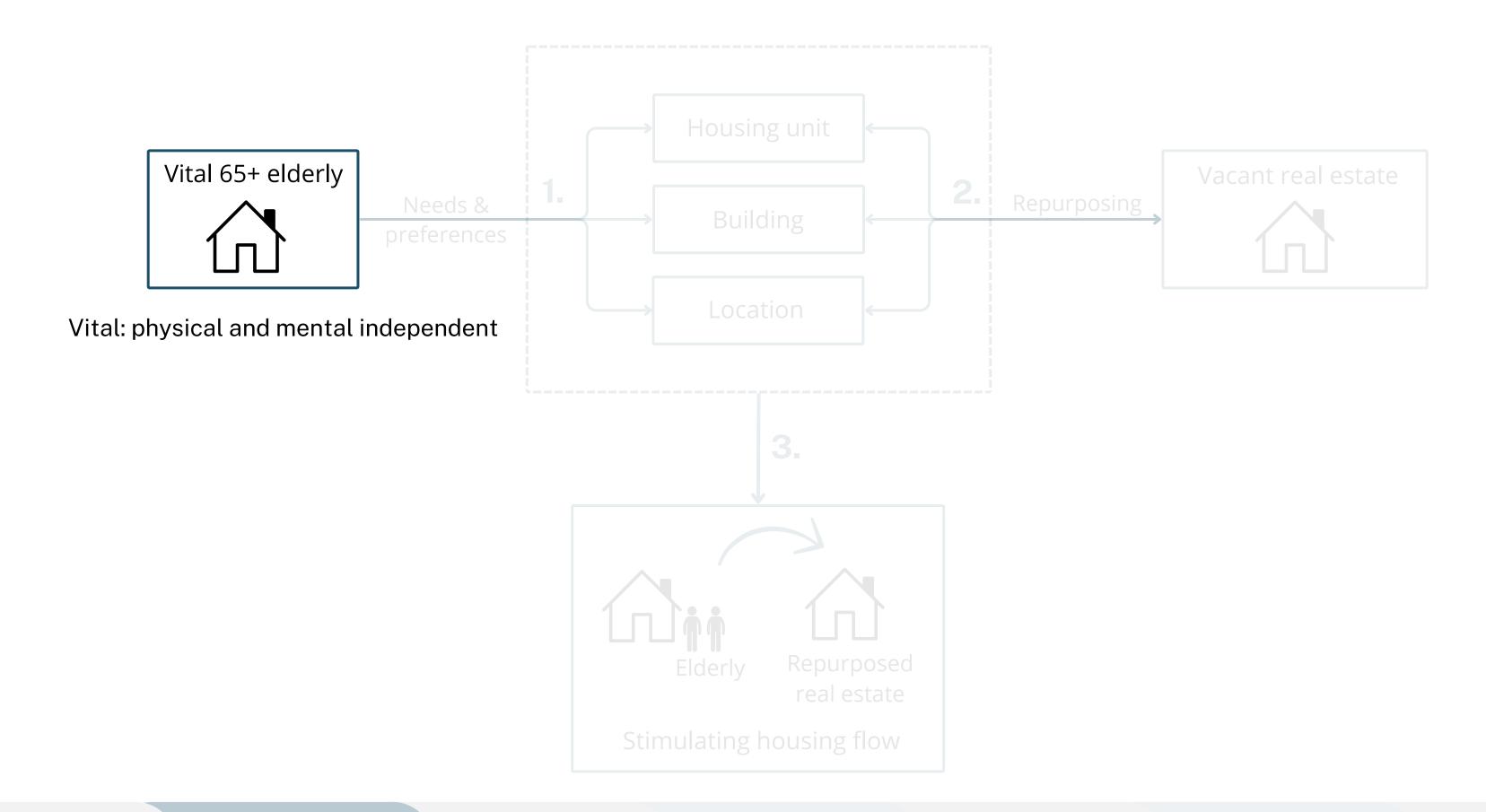
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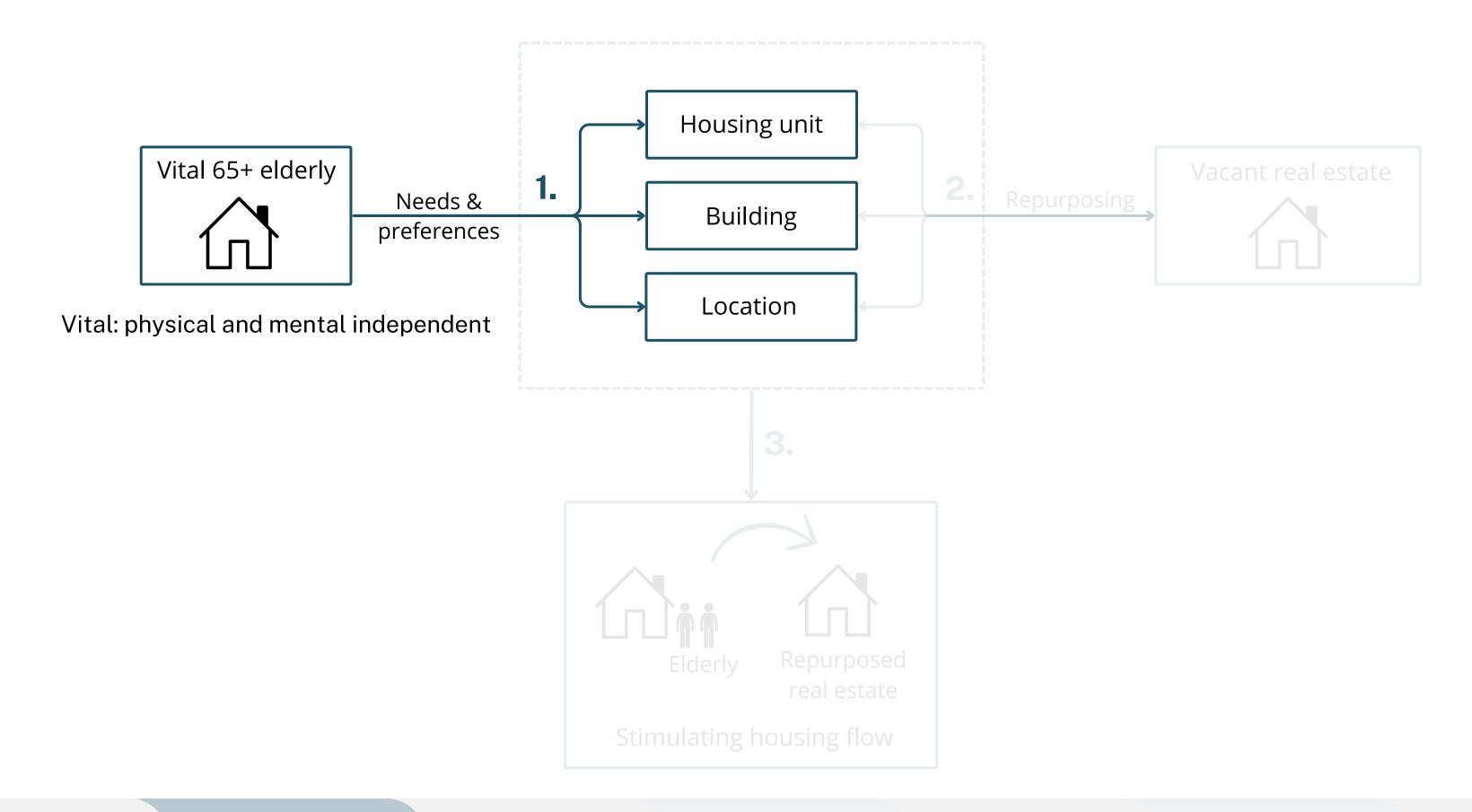


Results

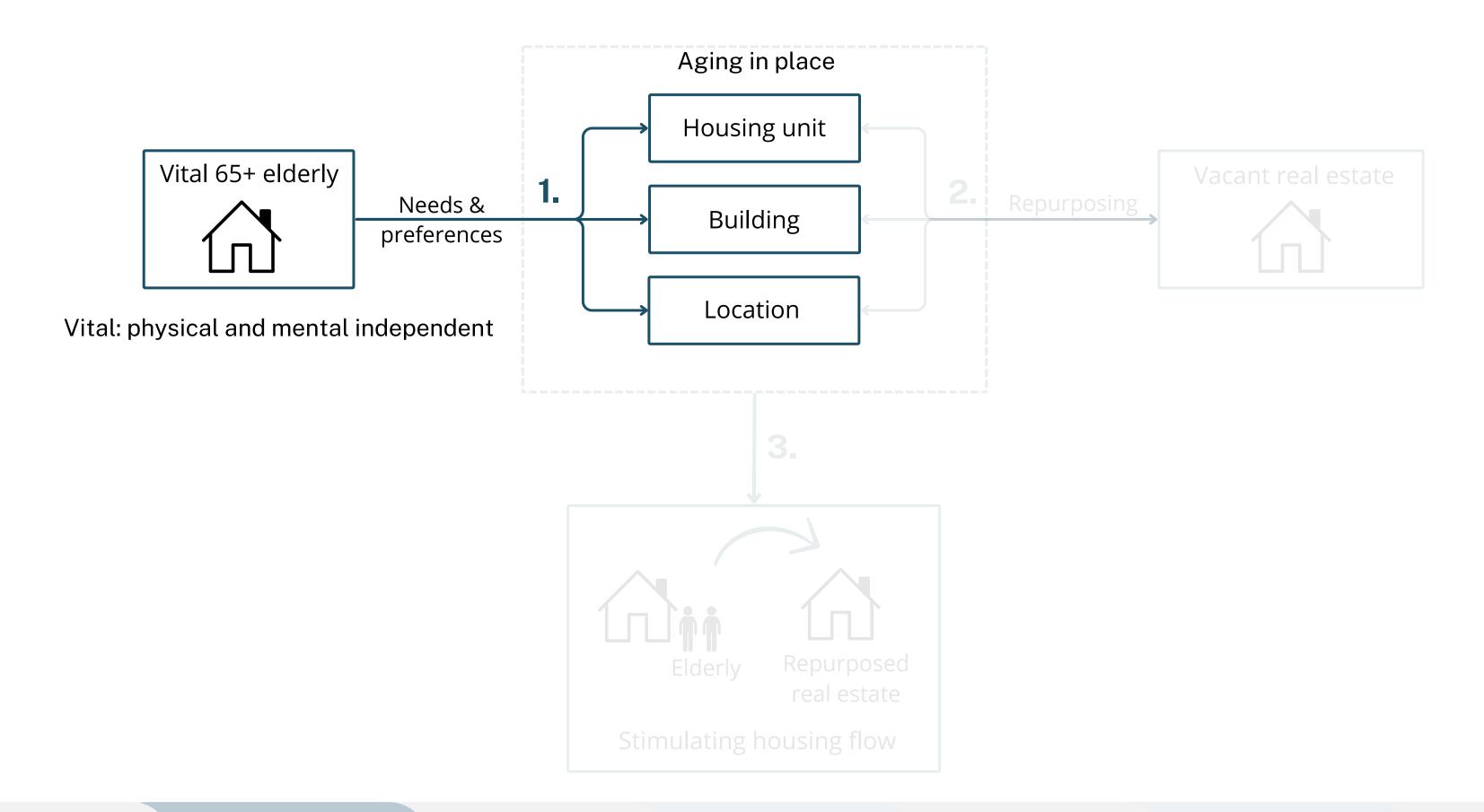
Theoretical background



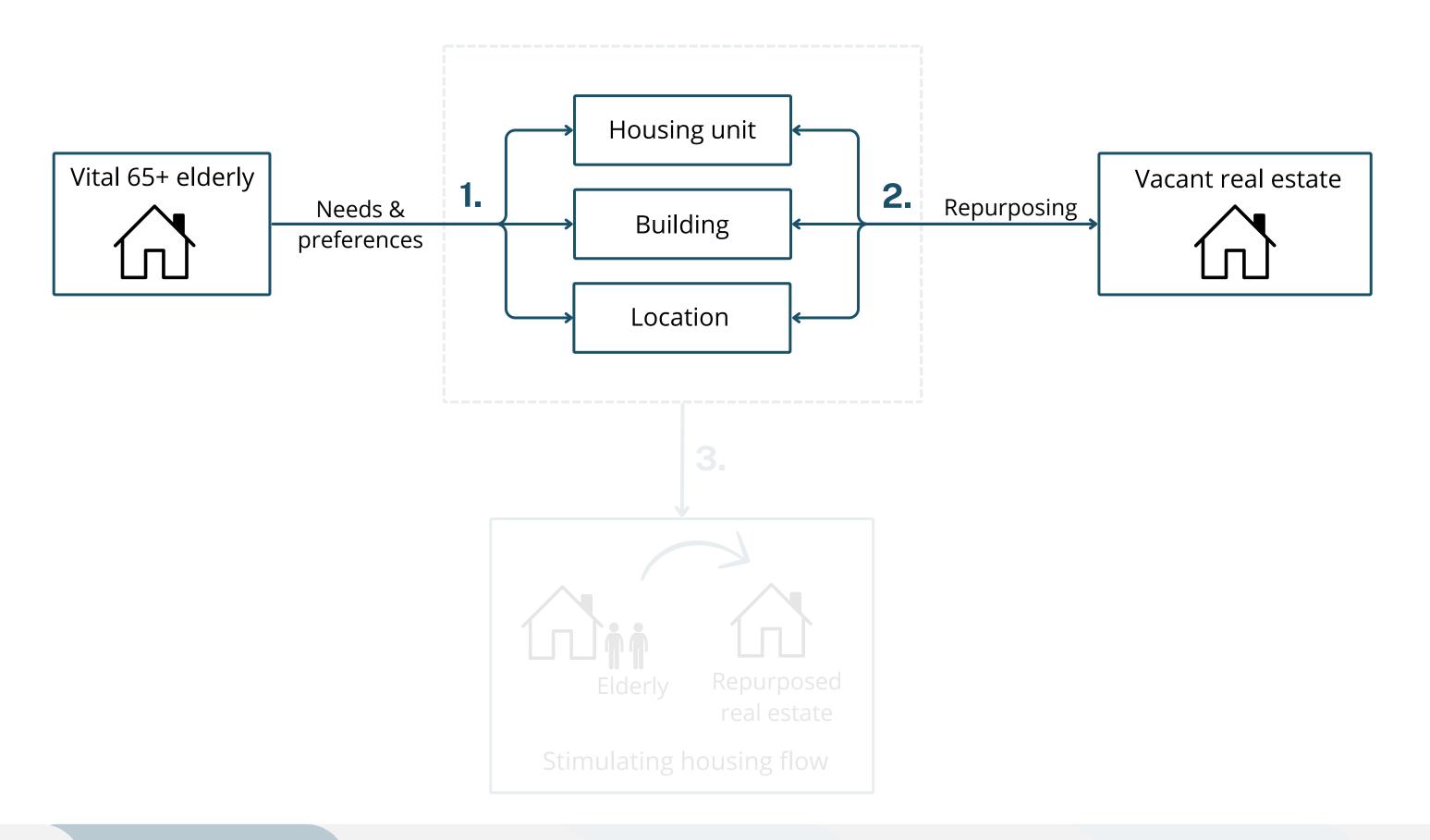
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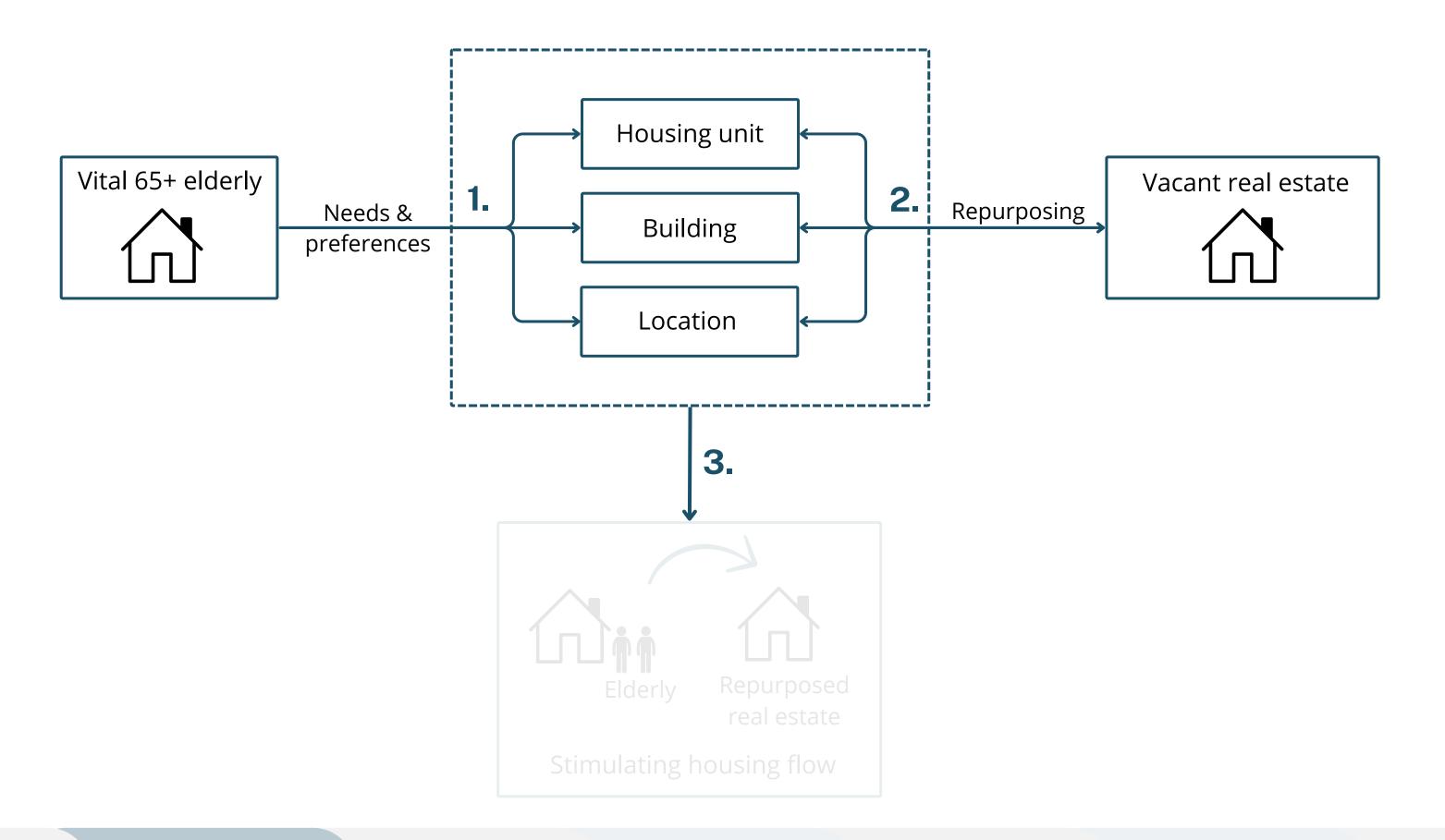


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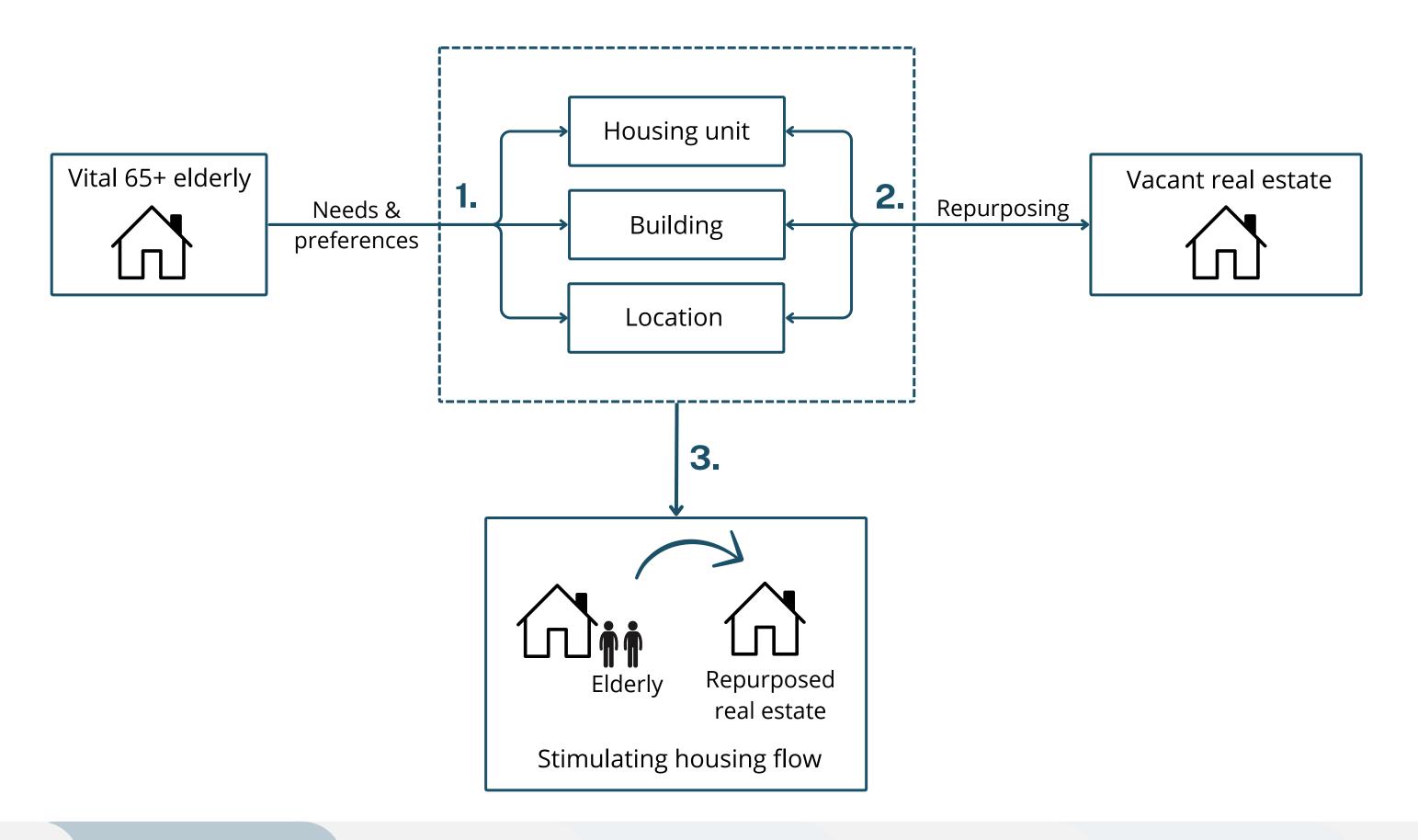


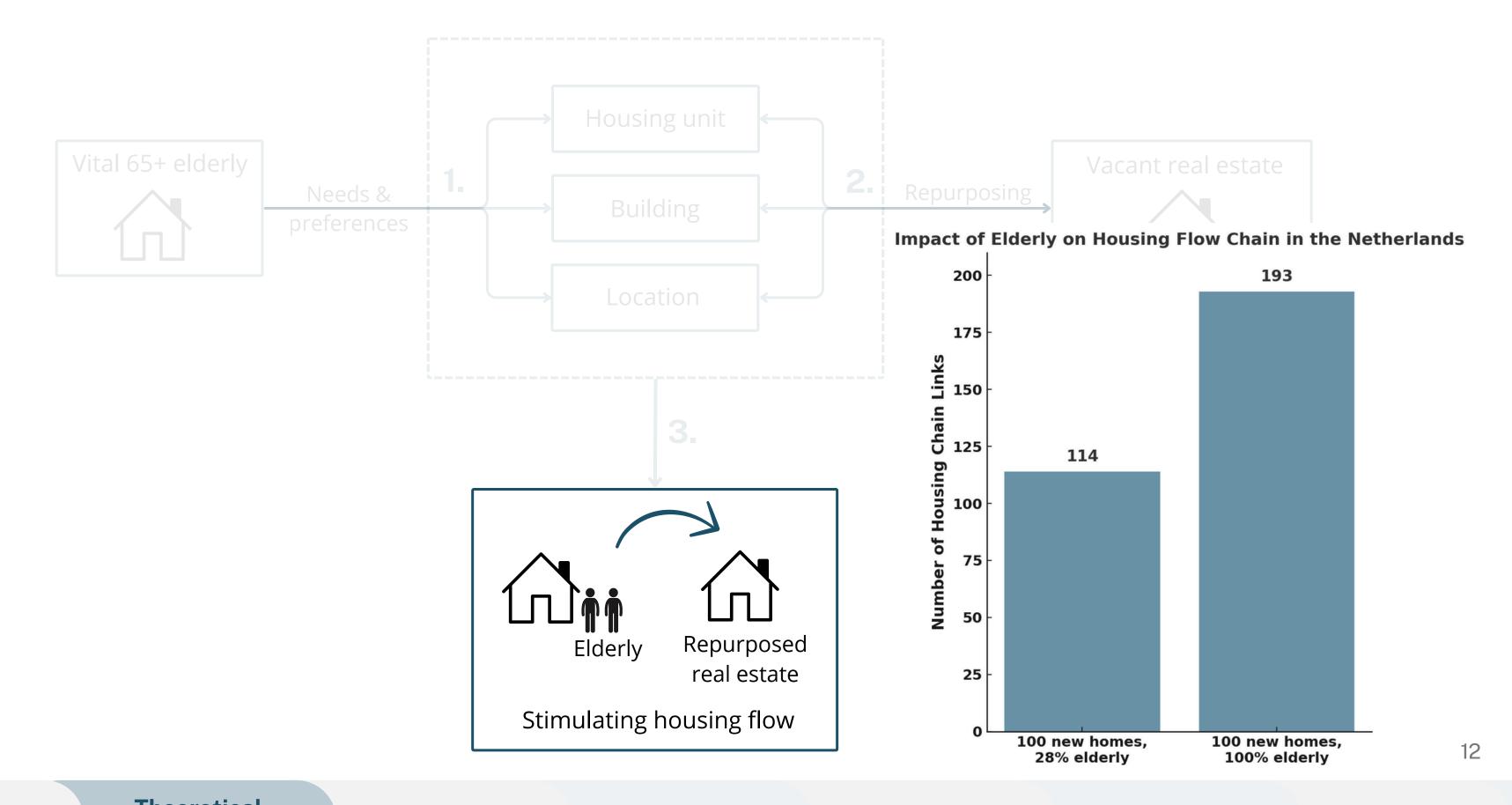
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Method

Research Methods

Multiple qualitative approach

SQ1: What are the key **housing needs and preferences** of the vital 65+ population in the Netherlands?

Literature review

• Elderly who want to move



Interview Elderly:

Introduction

Who already moved

SQ2: What are the barriers and opportunities to repurposing vacant real estate for elderly housing?

Literature review



Two case study:

- Analyse documents
- Interview elderly
- Interview experts





Interview experts

SQ3: How to overcome the barriers when integrating the housing needs and preference of the elderly?

"In what way can vacant real estate in the Netherlands be repurposed to meet the specific housing needs and preferences of the vital 65+ population?"

Assessment framework / step-by-step guide

Validation





Assessment framework / step-by-step guide

Case Studies



Case A: De getijden Nijmegen (2018)

Old function: School

Tenure type: Owner occupied

Size: 17 dwellings **Location:** Urban area



Case B: De Benring in Voorst (2014)

Old function: Nursing home Tenure type: Rental (social)
Size: 72 dwellings

Location: Rural area

Results

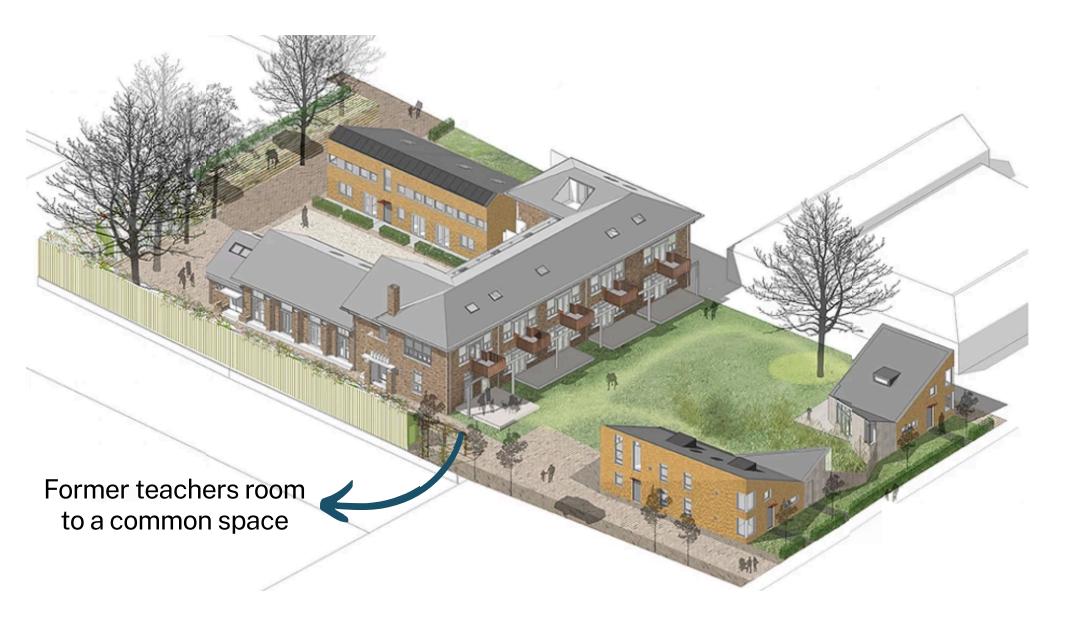
Case Studies

Case A: De getijden Nijmegen (school)

• CPO

Introduction

- Centrum location nearby amenities
- 17 dwellings:
 - o 6 new build
 - 11 in former school building





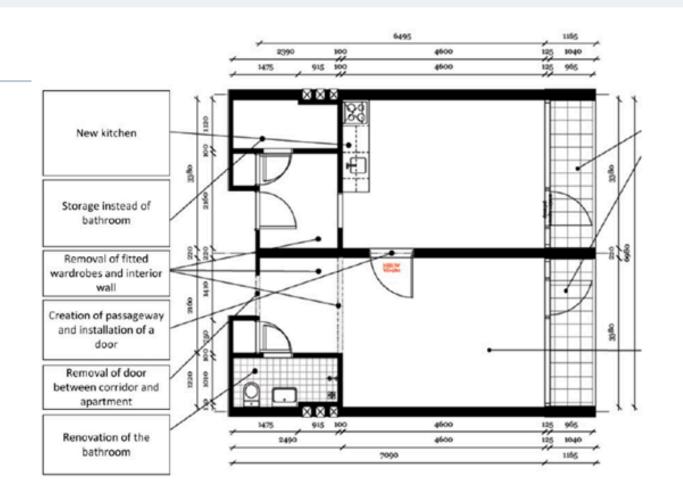


Case Studies

Case B: De Benring (nursing home)

- Green rural area
- "The windmill"
- 2 nursing home rooms → 2-room apartment
- Weekly activities







Results

Sub-question 1: What are the key housing needs and preferences (on housing unit, building and location level) of the vital 65+ population in the Netherlands?

Sub-question 1: What are the key housing needs and preferences (on housing unit, building and location level) of the vital 65+ population in the Netherlands?



- Life-cycle proof design
 - Primary spaces at one level
- Accessibility
- Affordability
- Apartments with 3 rooms
- Own outdoors space with less maintenance
- Ambiance





"The beams are still visible, that's what I love most about the home" (Interviewee A3, 2025).

Sub-question 1: What are the key housing needs and preferences (on housing unit, building and location level) of the vital 65+ population in the Netherlands?



- Accessibility
- A characteristic building
- Opportunities for social interaction
- Social safety
- Privacy



"If someone has missed coffee a few times. Then someone knocks on the door. That's taking care of each other. Very important." (Interviewee B12, 2025)

Sub-question 1: What are the key housing needs and preferences (on housing unit, building and location level) of the vital 65+ population in the Netherlands?



- Accessibility
- Essential amenities nearby
- Social
- Familiar



"Well, here you know everyone. Look, if you go to a completely different place when you're old, all the people who live there already have their own social network around them. And then you still have to start." (Interviewee B11, 2025)

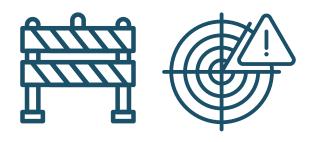
Results barriers and opportunities

Sub-question 2: What are the main barriers and opportunities to repurposing vacant real estate for elderly housing?

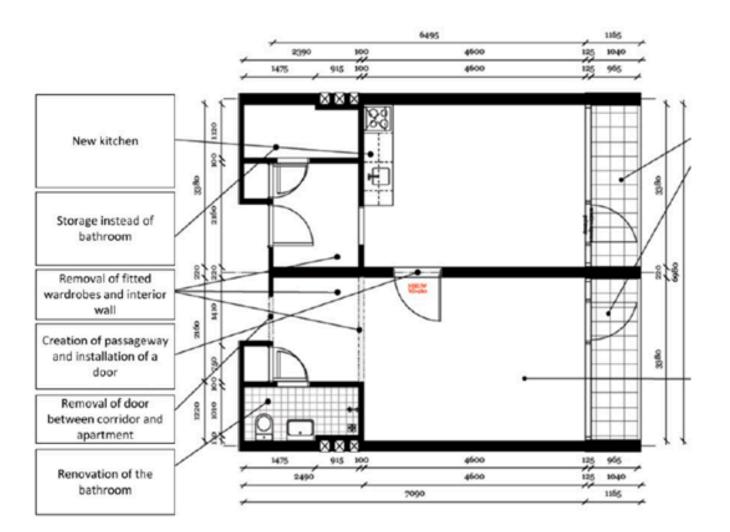
Results barriers and opportunities

Sub-question 2: What are the main barriers and opportunities to repurposing vacant real estate for elderly housing?

Barriers



- Adapting accessibility
- Spatial inequalities
 - Layout inflexibility
- Technical and structural limitations
- Financial
 - Unforeseen costs
- Building appearance
- Insufficient amenities nearby



"It's not the most practical solution. They turned two apartments into one home. But yes, if it had been newly built, you could have arranged it much more efficiently." (Interviewee B11, 2025)

"You are bound by the existing building." (Interviewee A6, 2025)

Results barriers and opportunities

Sub-question 2: What are the main barriers and opportunities to repurposing vacant real estate for elderly housing?

"There is a kind of spatial surplus in those old buildings, which makes them very flexible." (Interviewee A1, 2025)



"With new construction, you no longer get the communal spaces, like the ones you still have at De Benring, and you can keep the rent low." (Interviewee B9, 2025)

Opportunities

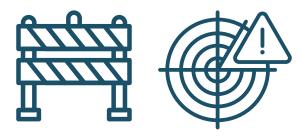


- Spatial quality
 - Already accessible
 - Surplus & high ceilings building
- Characteristic
- Potential for communal facilities
- Affordability
 - Through reuse
- To create elderly housing in familiar locations
- Central location with sufficient amenities

Results barriers and opportunities

Sub-question 2: What are the main barriers and opportunities to repurposing vacant real estate for elderly housing?

Barriers



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Opportunities



- Spatial quality
 - Already accessible
 - Surplus & high ceilings building
- Characteristic
- Potential for communal facilities
- Affordability
 - Through reuse
- To create elderly housing in familiar locations
- Central location with sufficient amenities
- Context dependent and linked to the adaptability of the building structure.

Results to overcome barriers

Introduction

Sub-question 3: How to overcome the barriers when integrating the housing needs and preferences of the elderly?

Results to overcome barriers

Sub-question 3: How to overcome the barriers when integrating the housing needs and preferences of the elderly?



- Creative design solutions
- Early contractor involvement and other experts
- Large unforeseen costs in the budget
- Fixed budget agreements
- Involve future residents

A combination of strategy:







Creative

Organisational

Financial



"So, there's a second entrance that is fully wheelchair accessible. But yeah, things like a main entrance with stairs are often difficult to make accessible for wheelchairs or walkers." (Interviewee A1, 2025)

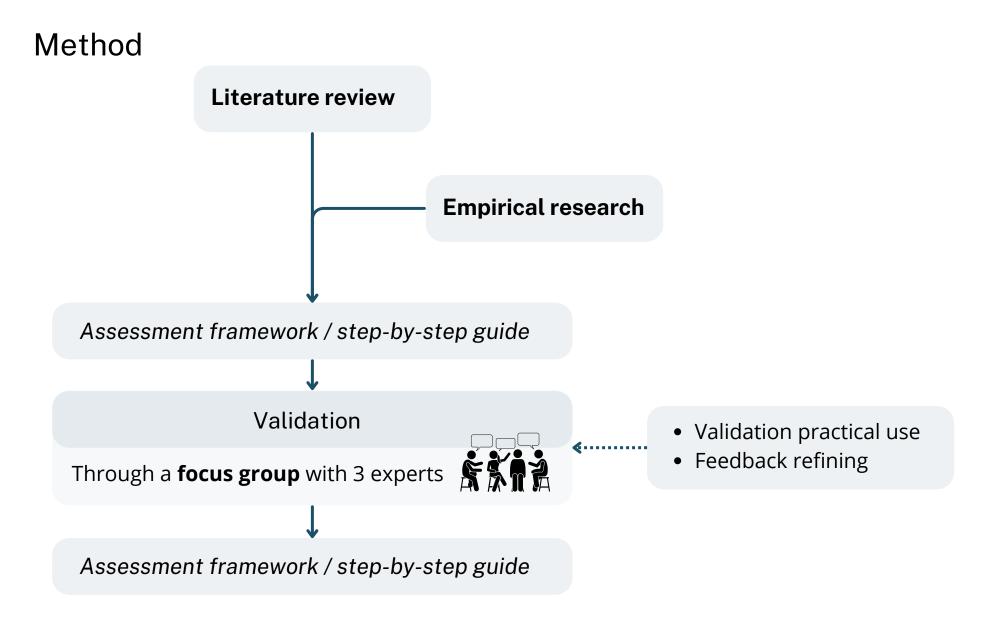
Assessment Framework

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Introduction Theoretical background Method Results Framework Discussion Conclusion

Creating deliverable

Conversation tool to start collaboration and support decision making





Framework

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Introduction

Step-by-step guide

Inspired by "Transformatiemeter" Remøy et al. (2024)

STEP 1: Willingness to transform to housing

STEP 2: Technical quickscan

• The technical condition and adaptability of the building.

STEP 3: Financial quickscan

• Costs compared to revenues

STEP 4: Application of the assessment framework

• To what extent the building can accommodate the specific housing needs and preferences

STEP 5: Determination of transformation class and design implications

Assessment framework

Step 4: Application of the assessment framework		Measurement	Score 0-5	Weighting 0-5	Points	Explanation
Users:	Housing unit level					
	Number of rooms	Number of rooms: 3	•	•	•	•
	Total score level					
	Building Level					
	Accessibility to housing unit	By stair chair lift or elevator or on single floor	•	•	•	•
	Total score level					
	Location Level					
	 Amenities General practitioner 	Less than 500 meters	•	•	•	•
	Total score level					
	Total score project					

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Assessment framework

Step 5: Determination of transformation class and design implications

Weighted Score (Housing unit, Building, and location level, and total)	Transformation Class
Weighted total score < 1	Class 1: Not transformable
Weighted total score 1 – 2	Class 2: Hardly transformable
Weighted total score 2 – 3	Class 3: Limited transformability
Weighted total score 3 – 4	Class 4: Transformable
Weighted total score 4 – 5	Class 5: Highly transformable

Determining transformation class for vital elderly housing. Based on Remøy et al. (2024), adapted by author.

• Gives an indication

Introduction

No definitive measurement of success

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Assessment framework

Interpretation of the transformation class outcome

Case A: De getijden (school)

	Total level score	Weighting level 0-5	Framework score
Total points housing unit level	3.78	4	15.13
Total points building level	3.62	4	14.46
Total points location level	4.02	4	16.43
Sum of weights & points		12	46.02

Total framework score: 3.84

Class 4: Transformable

- Always look at the scores of all levels
- See which variables score low
- Conversation tool to support decision making

Case B: De Benring (nursing home)

Framework

	Total level score	Weighting level 0–5	Framework score
Total points housing unit level	4.18	4	16.72
Total points building level	4.11	4	16.46
Total points location level	2.97	4	11.86
Sum of weights & points		12	45.04

Total framework score: 3.74

Class 4: Transformable

Interpretation of results

- Alignment theory and empirical
- Perspective experts and elderly
 - Experts: functional requirements
 - Elderly: practical day-to-day usability and emotional
- Differences within the 65+ elderly
- No one-size-fits all

Introduction

- → adaptable and flexible framework
- A tailored approach needed
- Assessment framework: conversation tool to start collaboration and supports decision making

Limitations

- Two case studies
- Only successful projects
- Bias elderly interviewed
- Three experts in the focus group
- New data available: WoOn24
- Lack of quantitative validation

Framework **Discussion Conclusion**

Recommendations for further research

- Quantitative validation
 - Analyse variation within vital 65+
- Adaptation to different elderly housing concepts
- Application in practice

Introduction

- Cases in early stages
- Usability and effectiveness in supporting decision-making
- Longitudinal research: change elderly housing needs as vitality decreases

Theoretical background Method Results Framework Discussion Conclusion

Conclusion

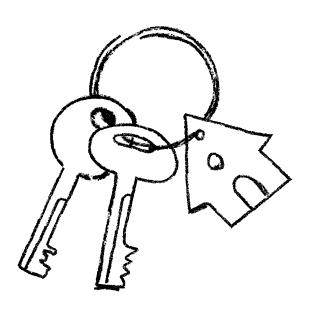
Conclusion

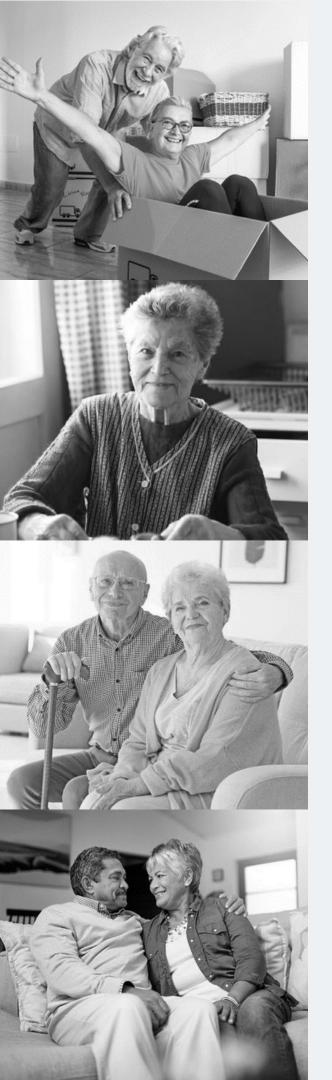
Main research question: In what way can vacant real estate in the Netherlands be repurposed to meet the specific housing needs and preferences of the vital 65+ population?

- To see if the building and location characteristics align with the preferences and needs
 - Assess the vacant real estate on the preferences and needs
 - Success depends on how well elderly needs fit within existing buildings and environment
- Assessment framework and step-by-step guide
 - o Practical and flexible conversation tool for collaboration and decision making
 - Helps evaluate if transformation is feasible and desirable

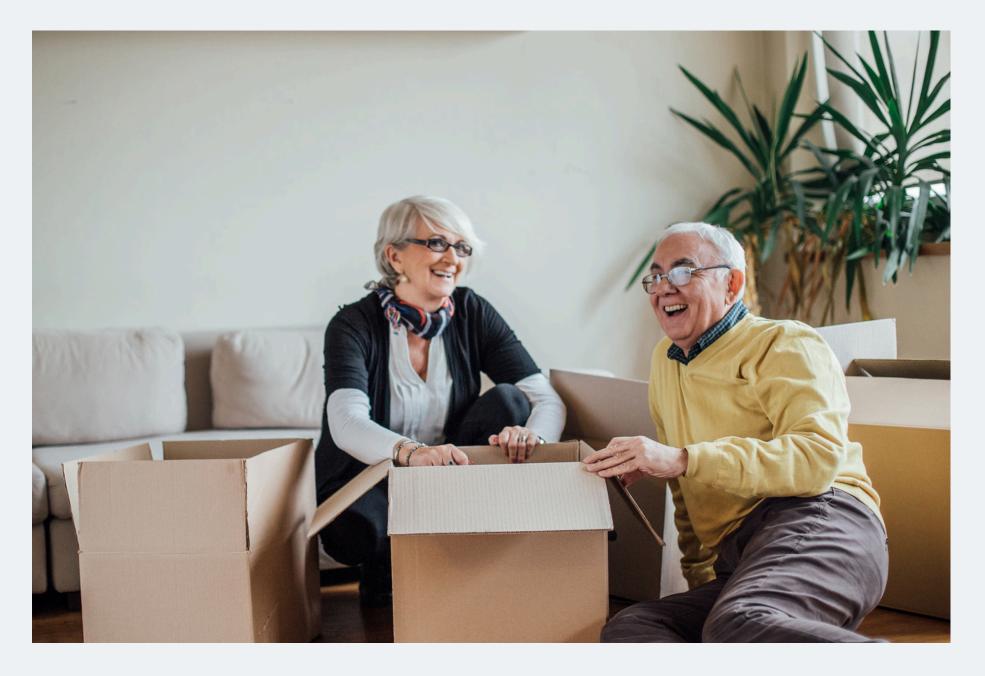
Recommended

- Involve elderly early in the process
- Consider all three levels, as well as the variables





Thank you!



Isabel de Bruijn 25-05-2025 P5 presentation