EHMA 2025
Taking action to improve health for all

Assessing Time Spent on Care Information Management in Home Care in Finland

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Prevalance of multimorbidity grows with age
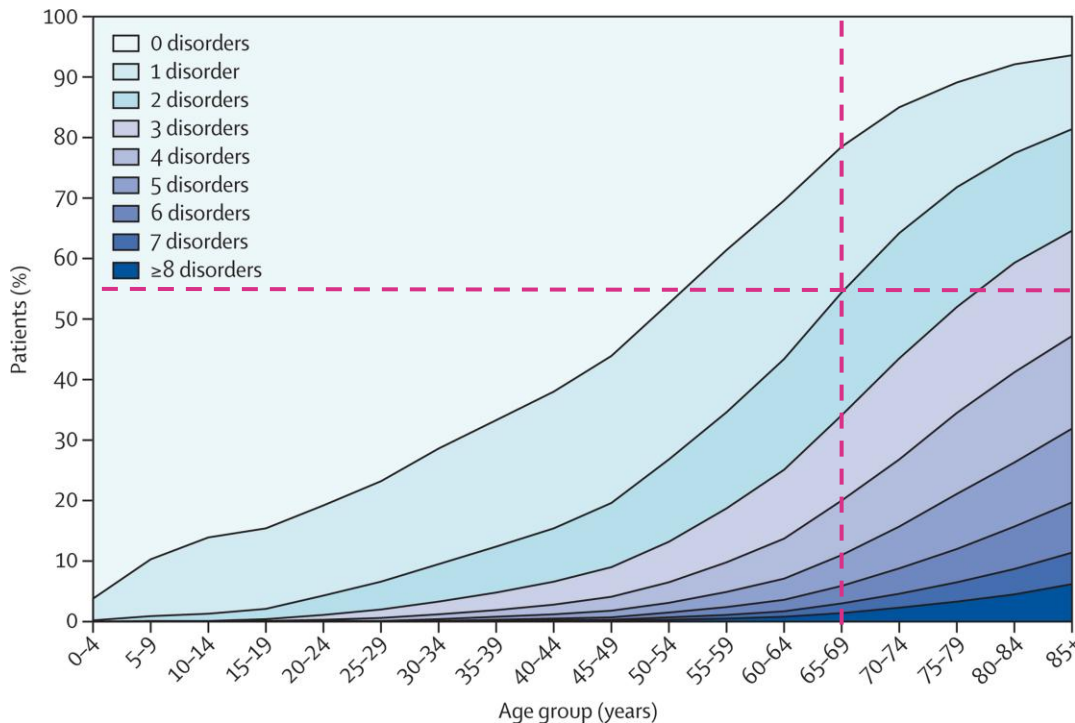
Multimorbidity affects 55% of 65-year-olds

Barnett, Karen et al. (2012) Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. The Lancet. Vol: 380, 9836 pp. 37 - 43

Information systems in practice

Home care
Emergency visits
Primary care
Specialized care
Social services

> 10 years
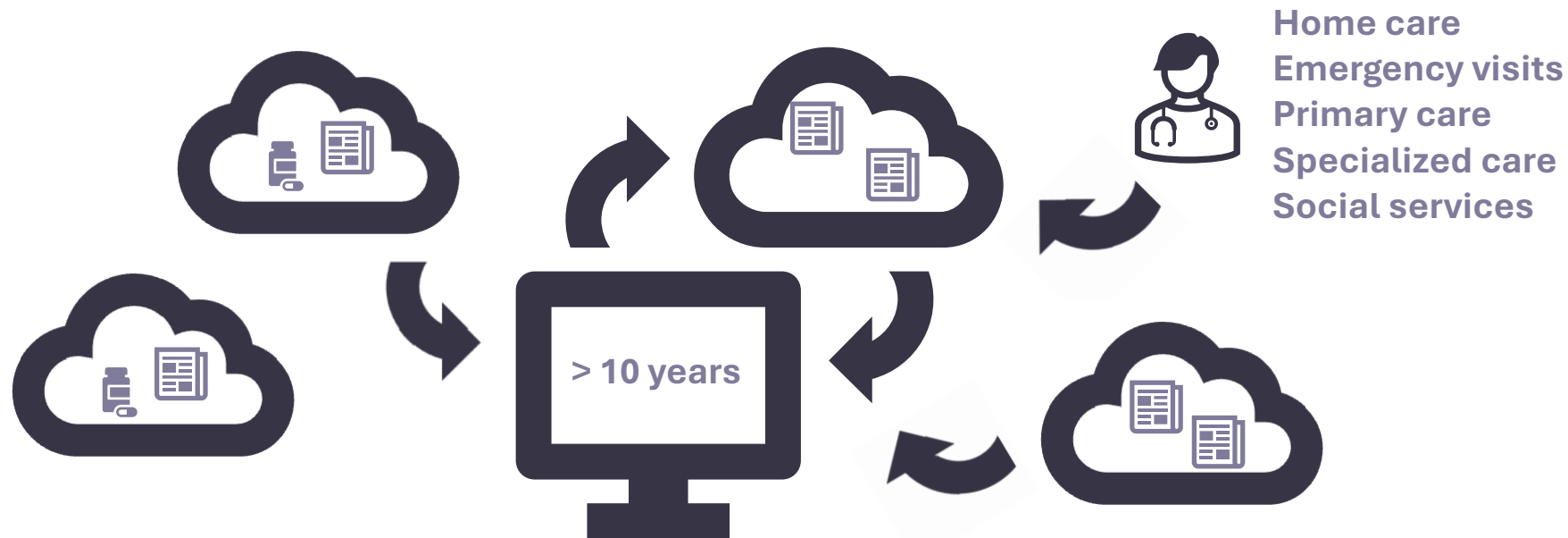
Vesinurm, M., Sylgren, I., Bengts, A., Torkki, P. and Lillrank, P. (2024) Concept analysis of patient journey disruptions: the obstacle of integrated care. Journal of Integrated Care, Vol. 32 No. 5, pp. 37-58.

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Methodology

→ Survey targeted all home care professions in four regions with different characteristics, representing ~20% of Finnish long-term home care clients
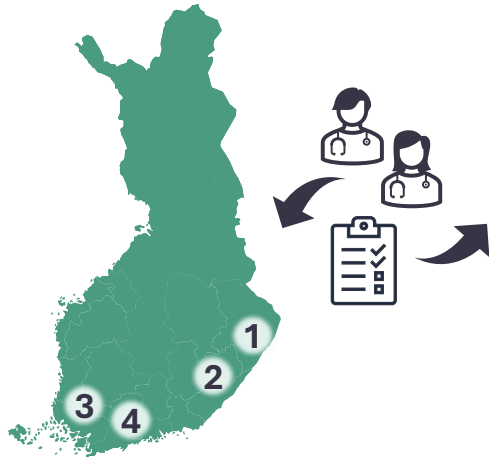
Measuring

Analysis

Time estimation questions of care information management x 5

weekly average

Descriptive statistics

Factors associated with the time use

Survey respondents

We got 755 responses with the response rate of 14.2-21.3% (avg. 17.1%)

Region (N)	Professions				Work		Demographic	
	Practical nurse (%)	Registered nurse (%)	Physicians (%)	Other prof. (%)*	Years of exp. (avg)	Client work (%)	Age (avg.)	Female (%)
A (96)	79%	17%	1%	3%	13.9	84%	44.3	89%
B (142)	60%	24%	4%	12%	13.8	87%	44.0	90%
C (146)	71%	17%	2%	10%	14.5	89%	45.2	95%
D (241)	65%	20%	4%	11%	14.6	95%	43.8	90%

Physiotherapists, assisting professionals, other uncategorized professions

Time use for each profession

On average, 4h 18min was used for the tasks, on a weekly basis

Task	Practical nurse		Other professions		Physician		Registered nurse	
	Mean (SD)	% of Total	Mean (SD)	% of Total	Mean (SD)	% of Total	Mean (SD)	% of Total
Q1. Retrieving information	60 (66)	32.2 %	74 (81)	32.8 %	164 (111)	46.5 %	137 (99)	25.7 %
Q2. Care coordination	35 (45)	18.6 %	47 (57)	20.7 %	44 (41)	12.5 %	117 (89)	22.0 %
Q3. Contacting clients	30 (42)	16.0 %	35 (48)	15.6 %	58 (84)	16.3 %	93 (77)	17.5 %
Q4. Responding to client contacts	31 (40)	16.6 %	38 (58)	16.7 %	40 (59)	11.3 %	92 (80)	17.3 %
Q5. Interprofessional communication	31 (46)	16.7 %	32 (44)	14.2 %	48 (86)	13.5 %	93 (86)	17.4 %
Total (min)	187 (195)		226 (225)		353 (271)		532 (373)	
Total (h, min)	3h 7 min		3h 46 min		5h 53 min		8h 52 min	

Factors associated with the time use

- We found no other factors affecting the total time, except the professions ($p<0.001$) with ANOVA

- Modelling with linear multiple regression, we got adjusted R^2-value = 0.2294 (non-adjusted R^2 = 0.2405) with DF = 615 (p-value $2.2 * 10^{-16}$)

- Covariates in the model
  - Profession (p-value < 0.001)
  - Direct client care (p-value 0.041)
  - Region (p-value 0.282)
  - Full-time employment (p-value 0.316)

INTERPRETATION

1 Registered nurses, physicians and physiotherapists spend most time on care information management, especially on information retrieval

2 Distribution also varied markedly within the professions, potentially influenced by factors such as the working environment, work organization, and other elements supporting information workflows

3 More research is needed on

- The efficiency of IT-systems and how they are used

- Whether the information required for coordination tasks could be pre-defined and automatically collected?