

The COME-ON study: a Collaborative approach to Optimize Medication Use For Older People In Nursing Homes



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Funded by



UCL

Université catholique de Louvain

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Conflicts of interest

None

The facts...

Median number of
chronic medication per
Belgian Nursing Home
Residents (NHRs) per
day: 8

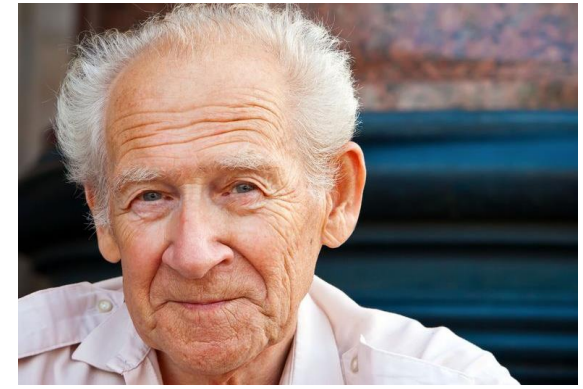
Range: 0 - 22

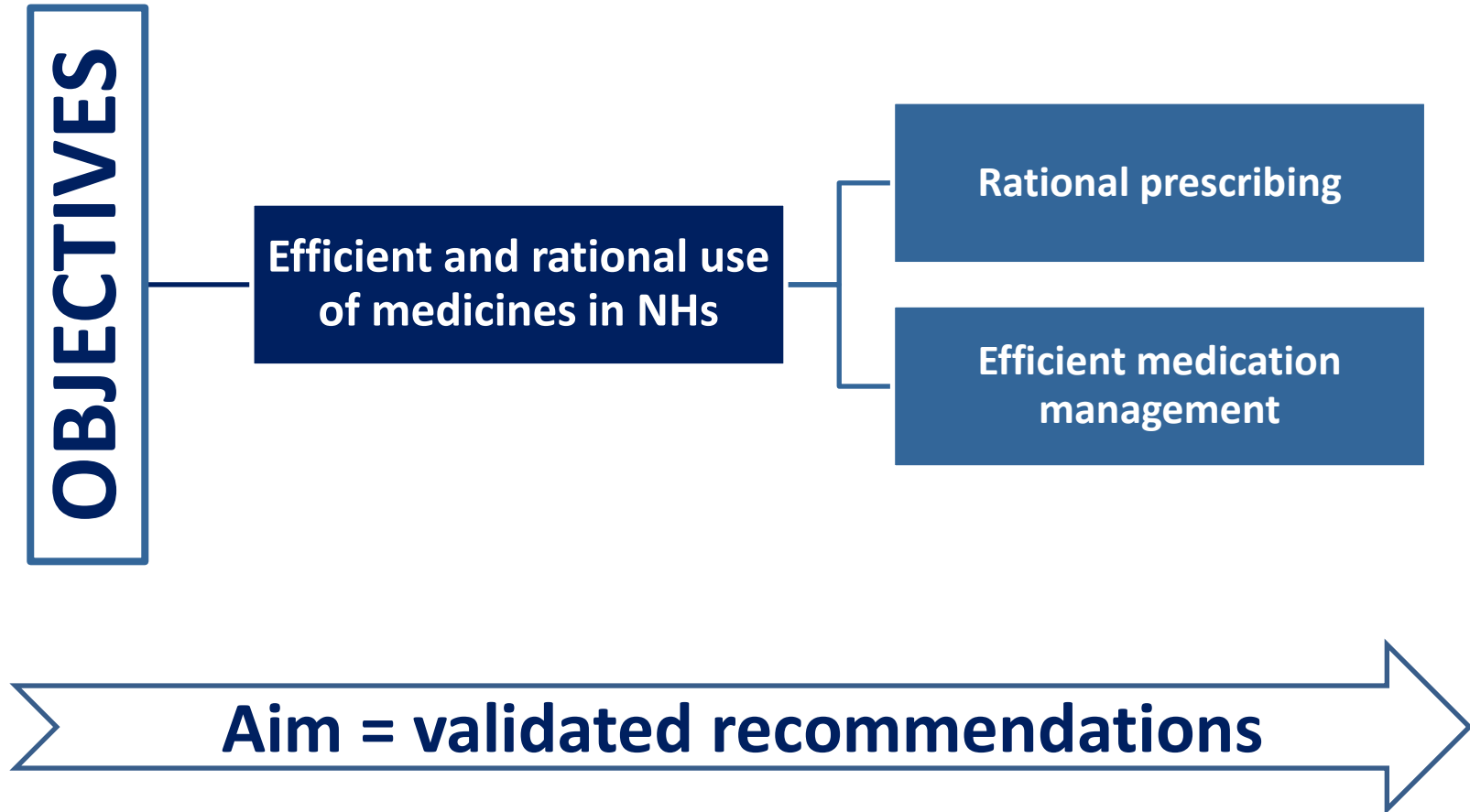
Inappropriate prescribing

- Overprescribing
- Misprescribing
- Underprescribing

Methods to **improve**
appropriateness:

- Multifaceted
interventions
- At least training of HCPs





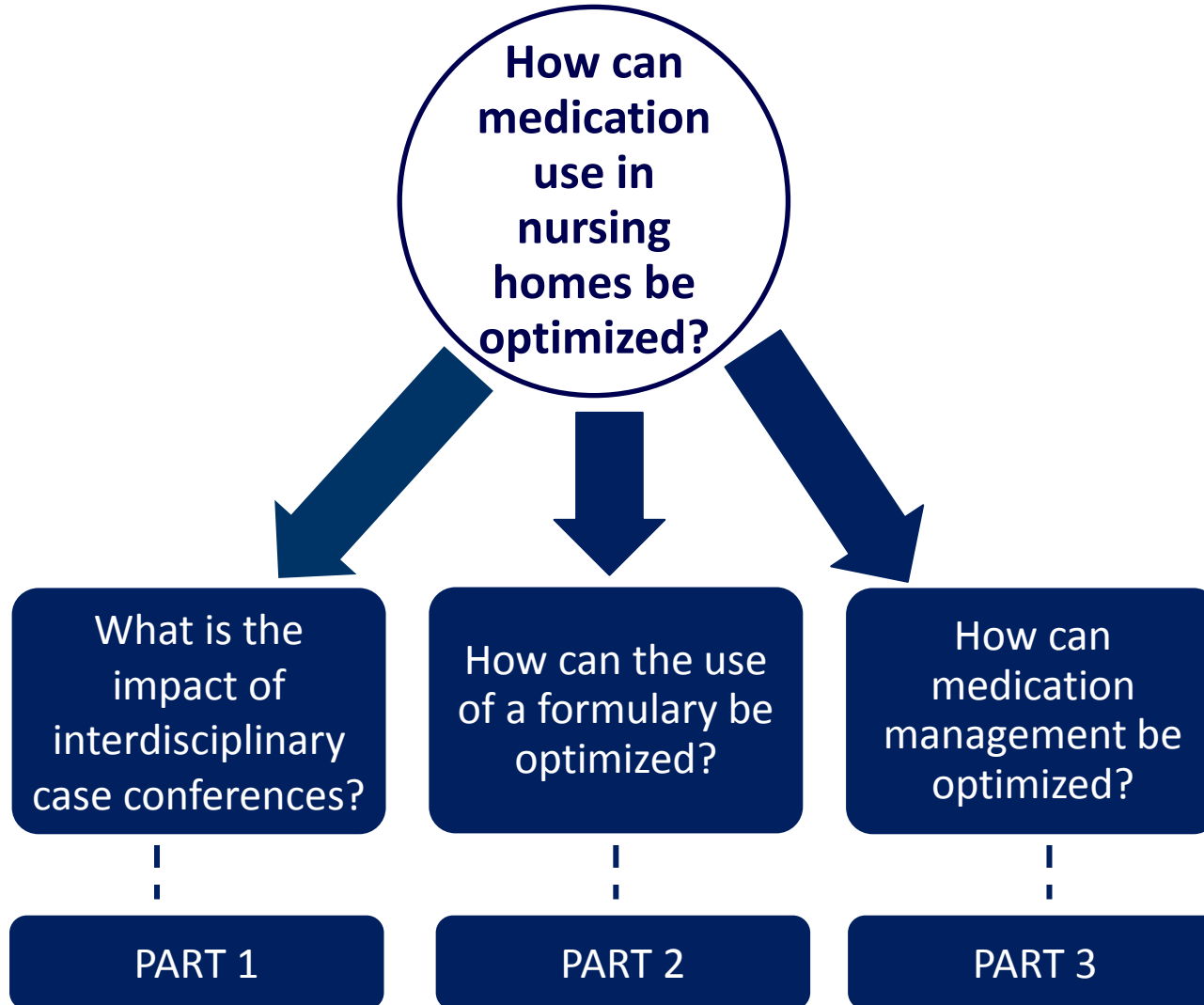
CONSORTIUM UCL – KU Leuven

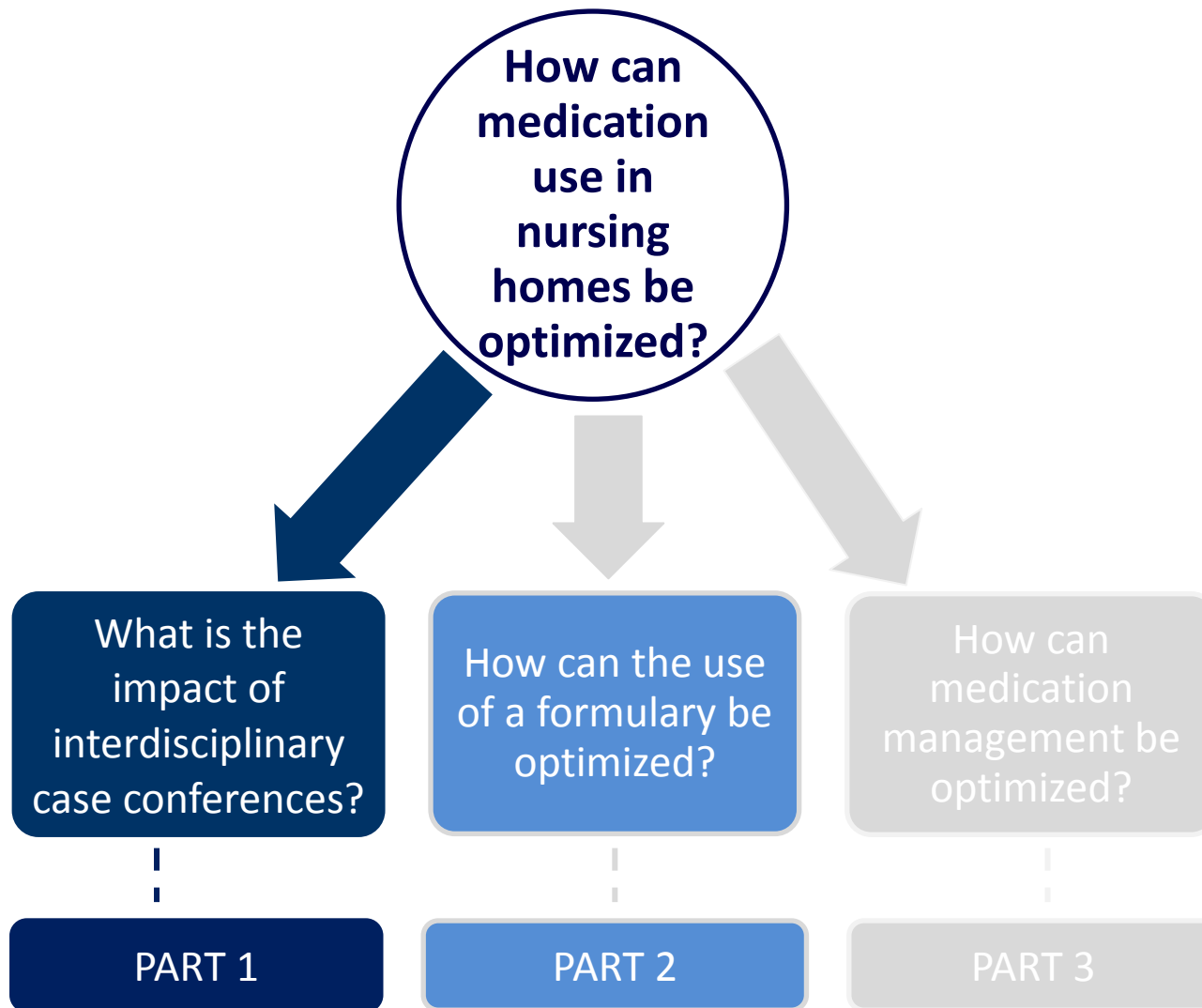
Anne Spinewine, Veerle Foulon, Pauline Anrys, Goedele Strauven

Benoit Boland, Jan De Lepeleire, Jean-Marie Degryse, Valérie Lacour,
Steven Simoens, Severine Henrard, Anja Declercq, Kris Vanhaecht,
Olivia Dalleur, Jean Macq, Niko Speybroeck, Thérèse Van Durme

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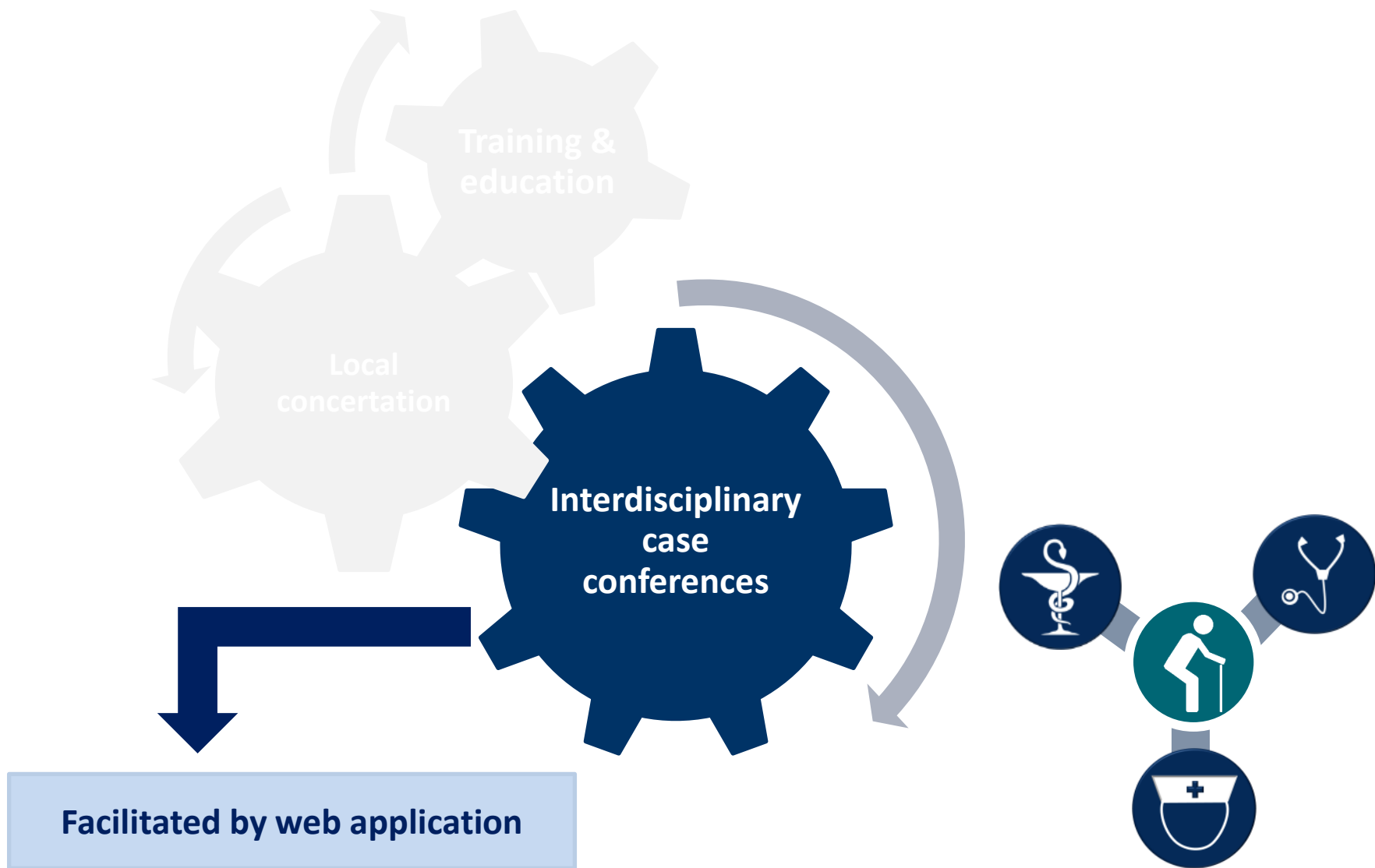
KU LEUVEN





What is the impact of interdisciplinary case conferences

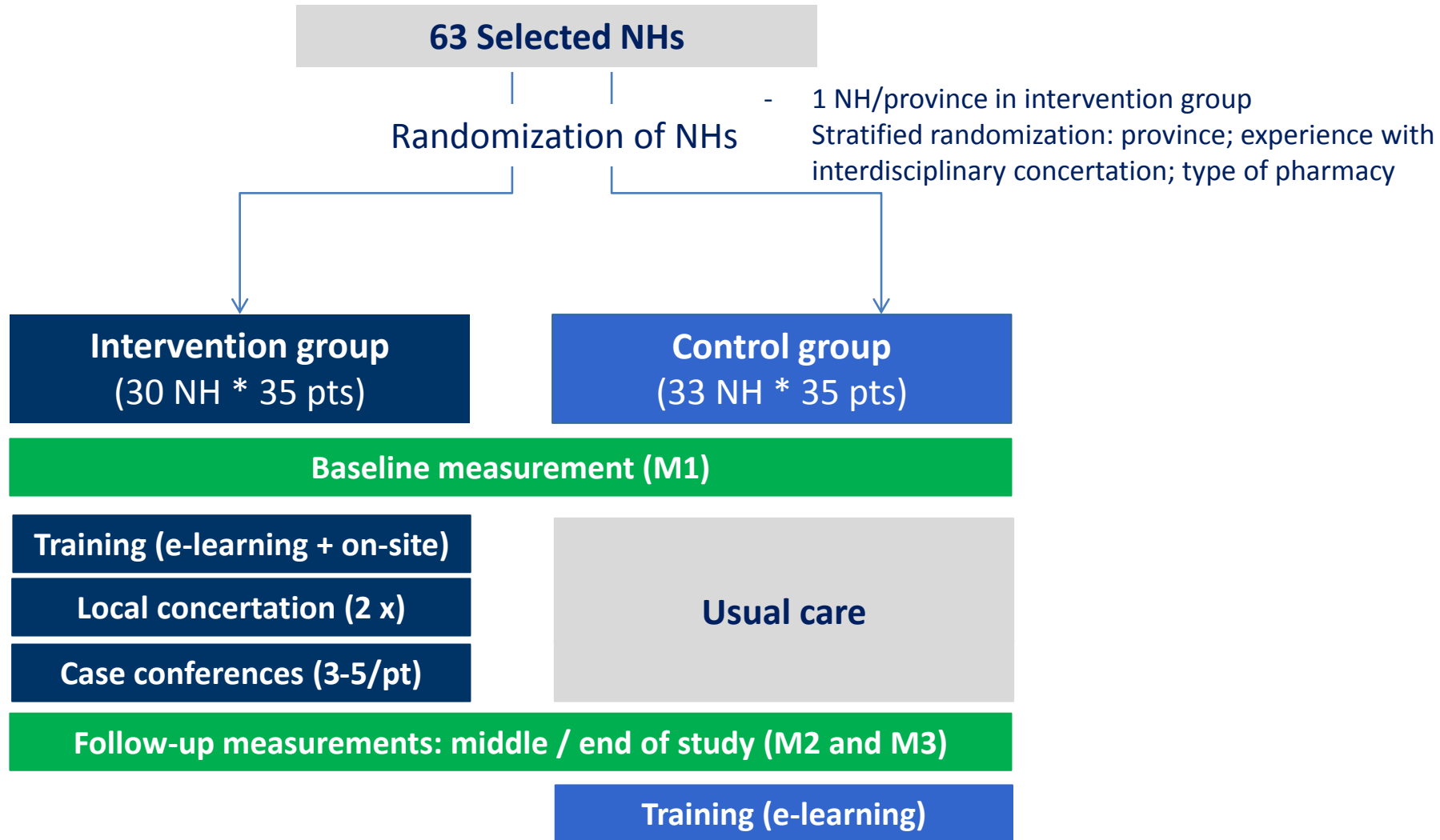
- On the appropriateness of prescribing?
- On medication use?
- On clinical outcomes?
- On cost?





Complex, multifaceted intervention





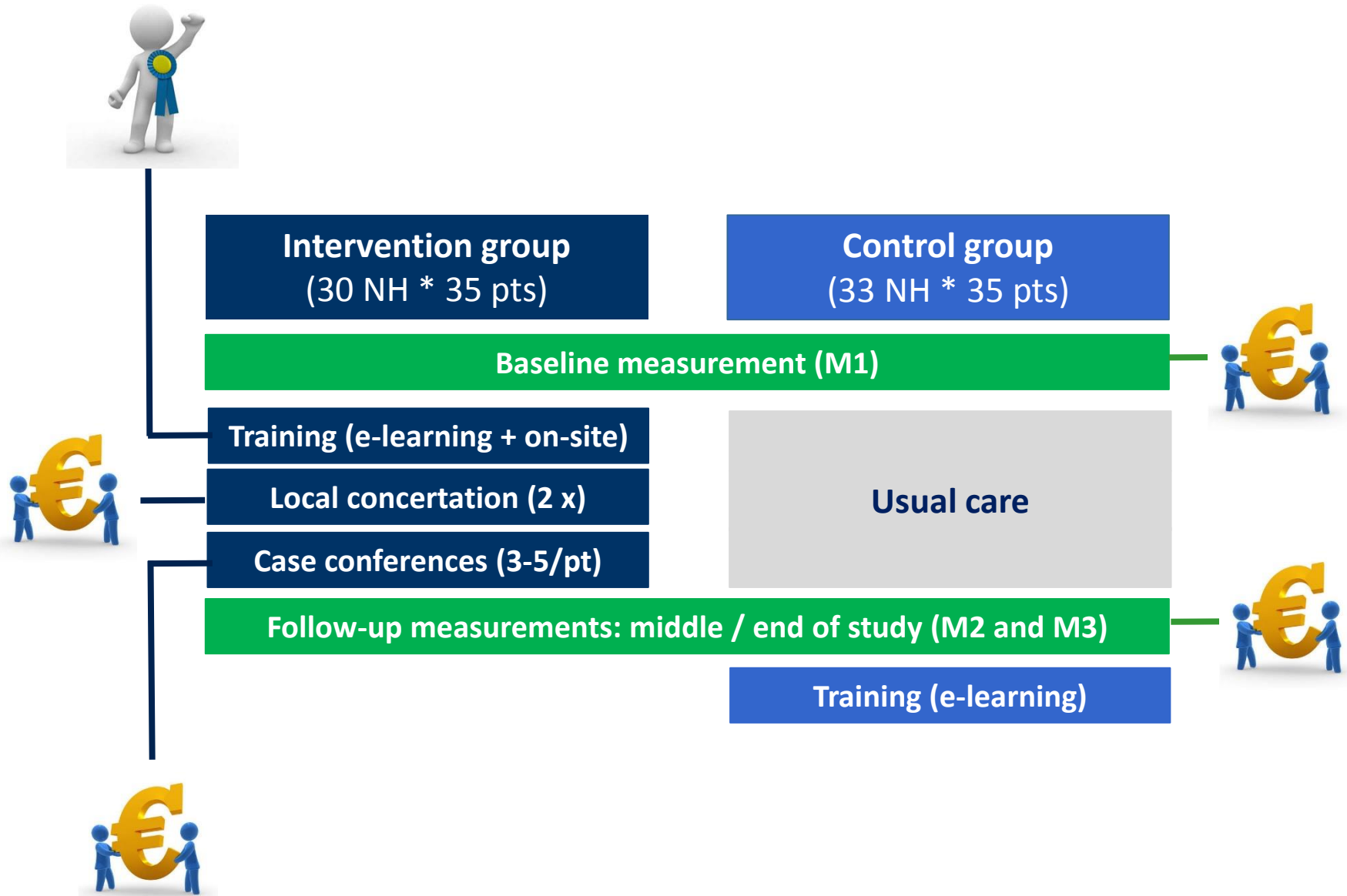
INCLUSION

- Aged 65 or older
- Under the care of a participating GP
- Signed informed consent









EXCLUSION

- Palliative care
- Short stay / revalidation

Incentives for participants?



Shared responsibility

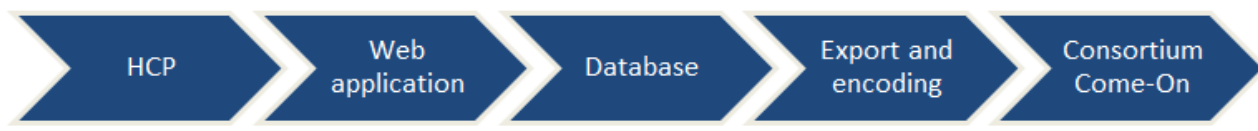
Data collection	Who?	Baseline	Middle of study	End of study
		April 2015	November 2015	June 2016
Administrative & demographic (resident) data		✓	✓	✓
Clinical data		✓	✓	✓
Indications, scoring comorbidities and lab values		✓	✓	✓
Medication profile		✓	✓	✓
Economic parameters (hospitalization,...)			✓	✓
Data nursing home		✓	×	×
Data health care professionals		✓	×	×
Questionnaire "nursing home medication team-work"		✓	×	✓

LEGEND

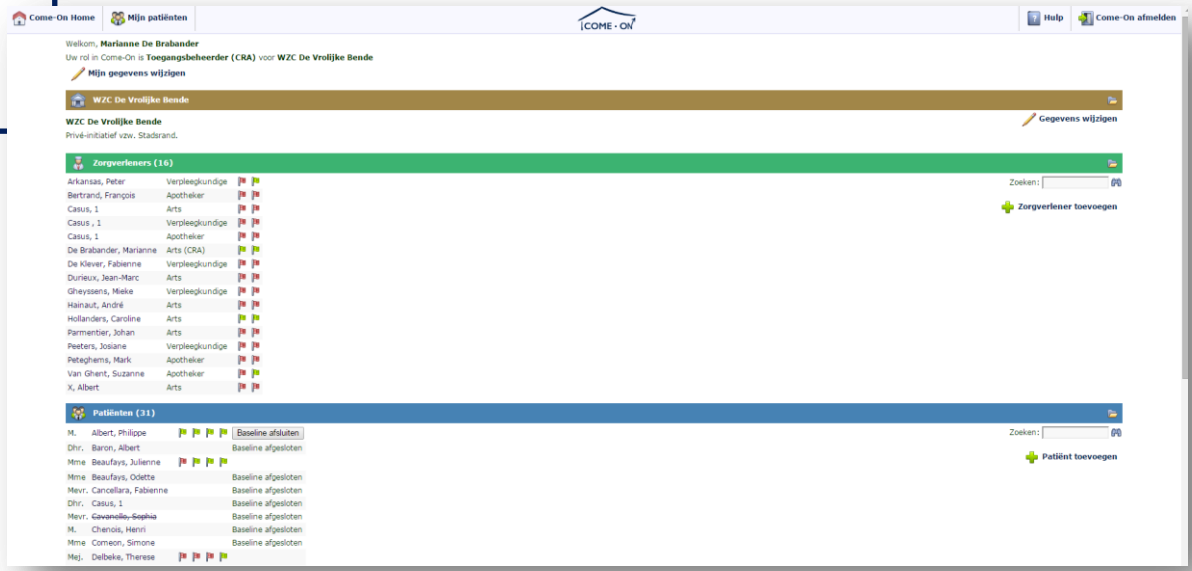
✓ = data collection at fixed data collection moments or after each concertation (requested by researchers)

× = no data collection at these moments

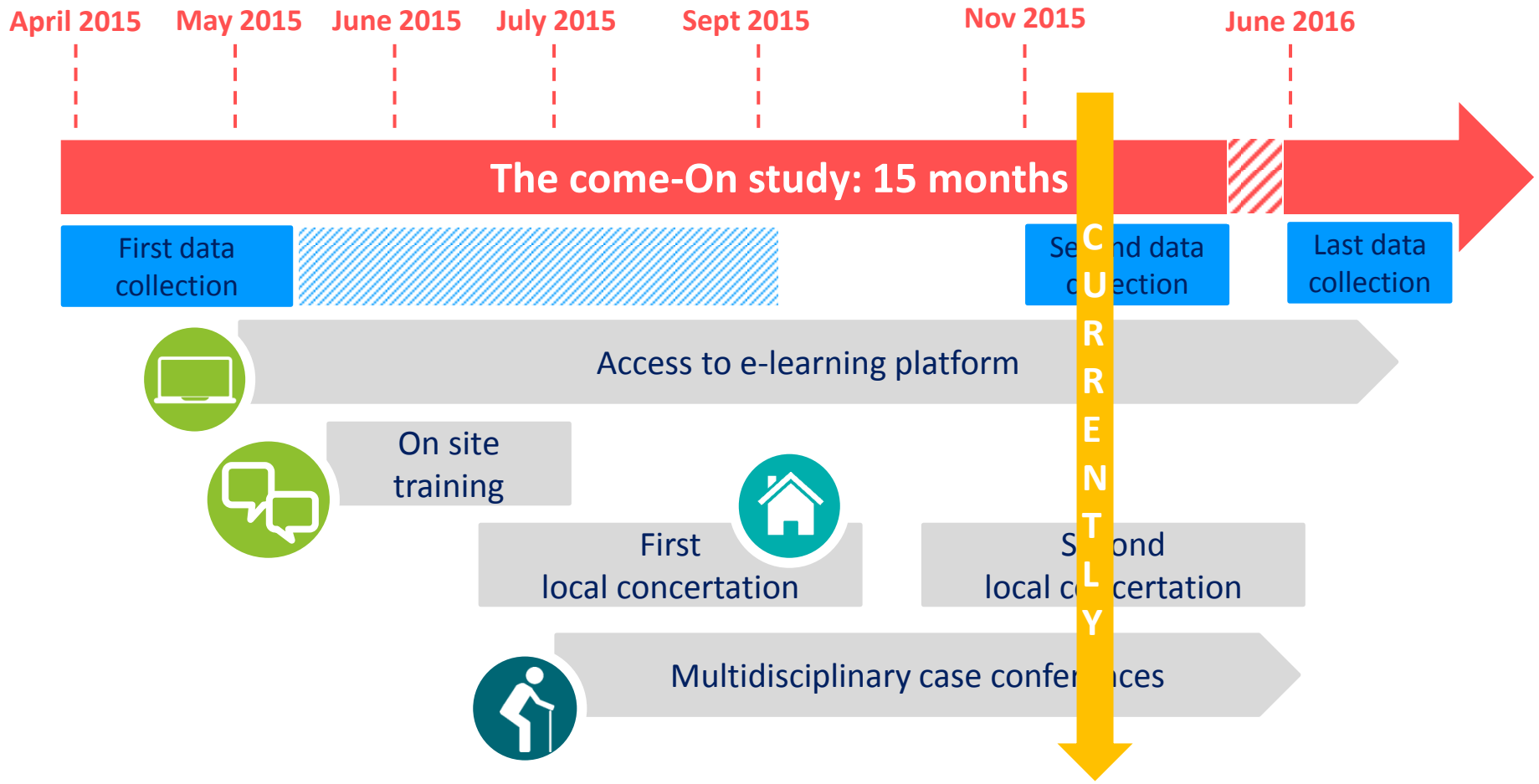
Facilitated through web application



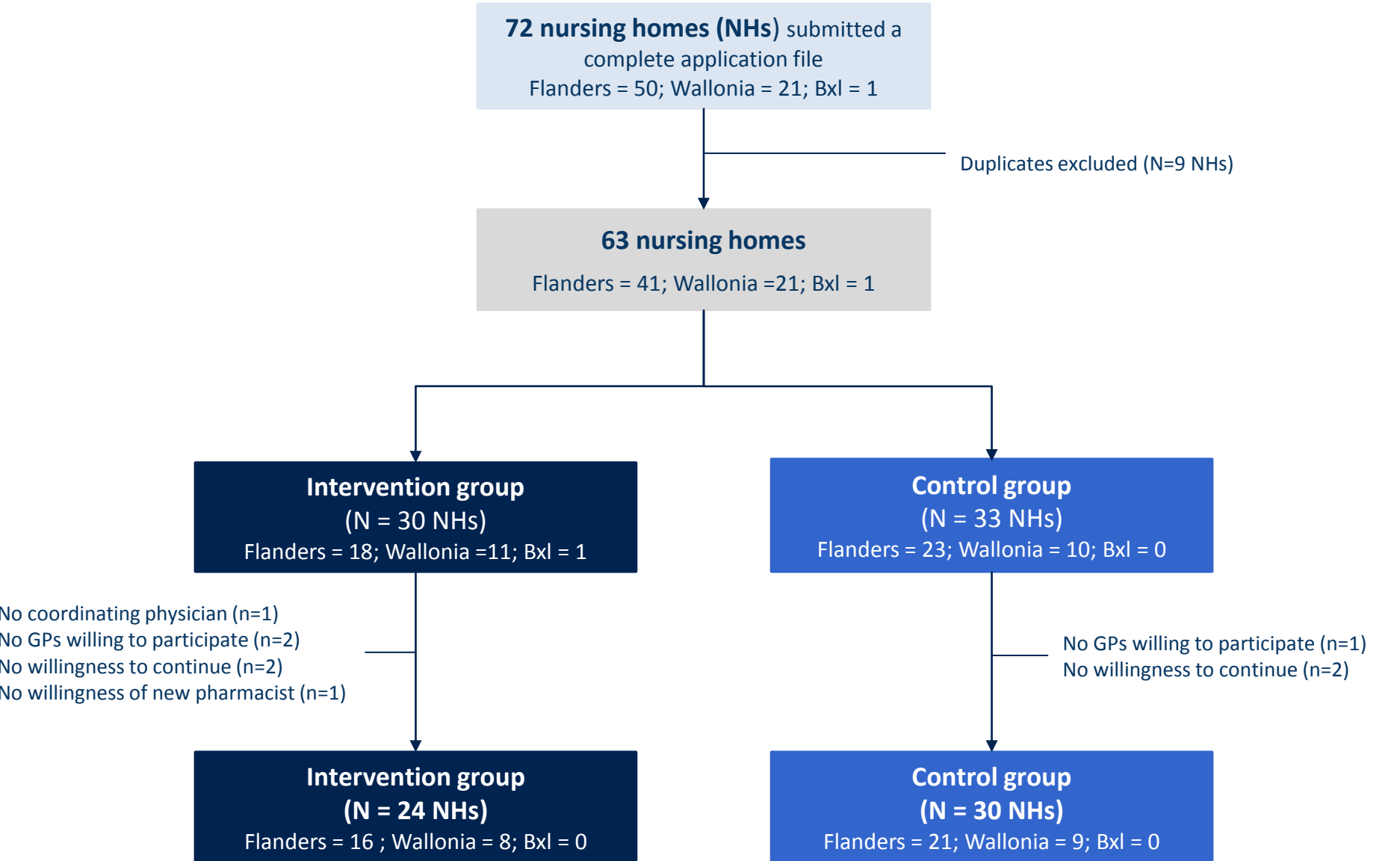
eID: user
Role validation: registered HCP
Role-based access
Therapeutic relationship







Planning



Participants: Nursing Homes (NHs)



Participants: Health Care Professionals (HCPs) and Nursing Home Residents (NHRs)

GROUP	REGION				
Intervention group	Flanders	133	27	86	586
	Wallonia	66	18	35	266
	Total	199	45	121	852
Control group	Flanders	129	26	59	700
	Wallonia	66	11	21	260
	Total	195	37	80	960
TOTAL		394	82	201	1812

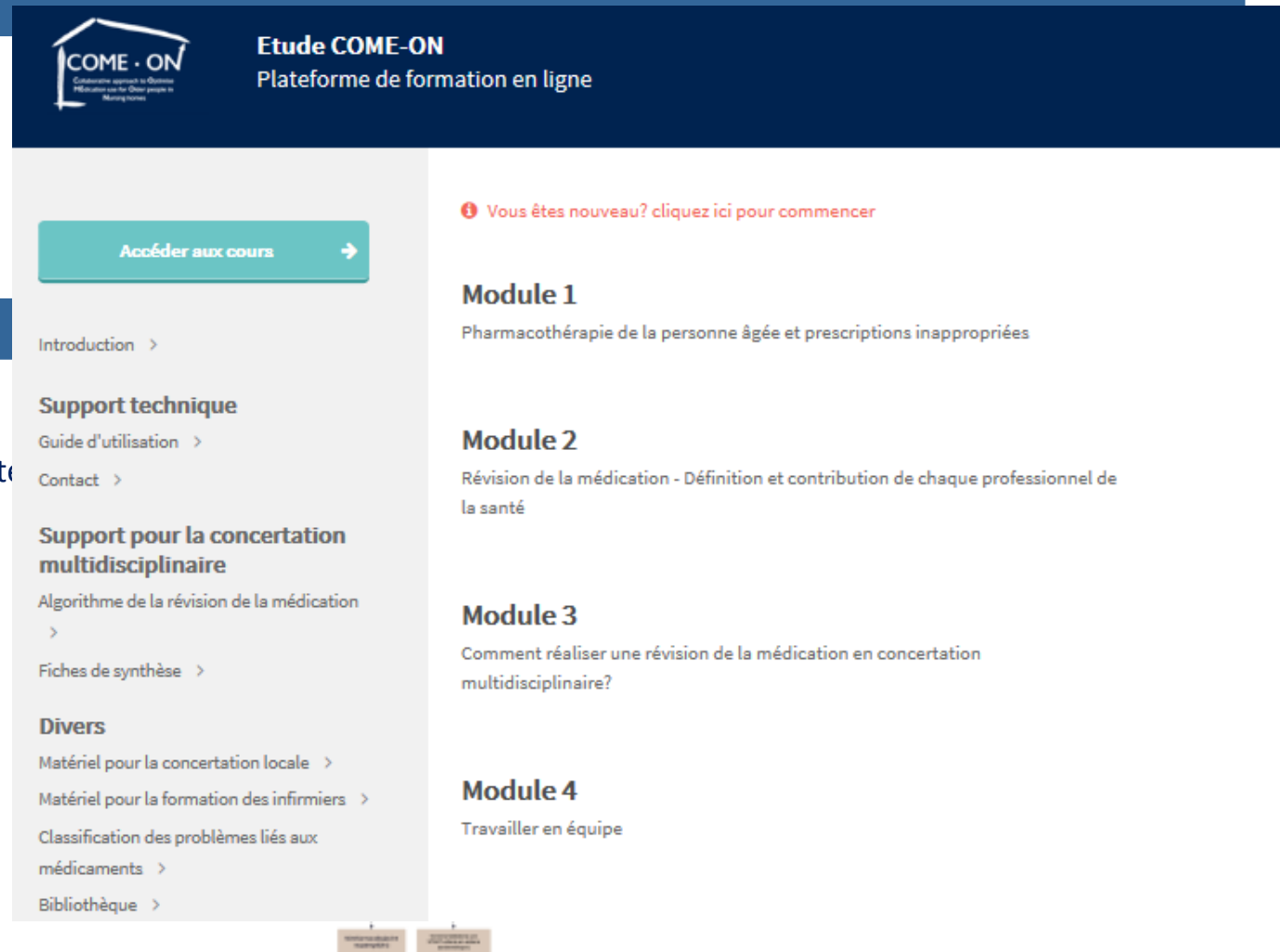
Development and implementation of a blended learning program

E-learning



Educational material

- Fiches
- Algorithm
- Shortlist STOPP/START-criteria



Etude COME-ON
Plateforme de formation en ligne

[Accéder aux cours](#) →

Introduction >

Support technique

Guide d'utilisation >

Contact >

Support pour la concertation multidisciplinaire

Algorithme de la révision de la médication >

Fiches de synthèse >

Divers

Matériel pour la concertation locale >

Matériel pour la formation des infirmiers >

Classification des problèmes liés aux médicaments >

Bibliothèque >

Vous êtes nouveau? cliquez ici pour commencer

Module 1
Pharmacothérapie de la personne âgée et prescriptions inappropriées

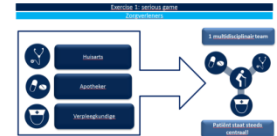
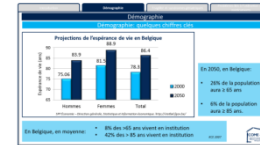
Module 2
Révision de la médication - Définition et contribution de chaque professionnel de la santé

Module 3
Comment réaliser une révision de la médication en concertation multidisciplinaire?

Module 4
Travailler en équipe

Development and implementation of a blended learning program

E-learning



Educational material

- Fiches
- Algorithm
- Shortlist STOPP/START-criteria



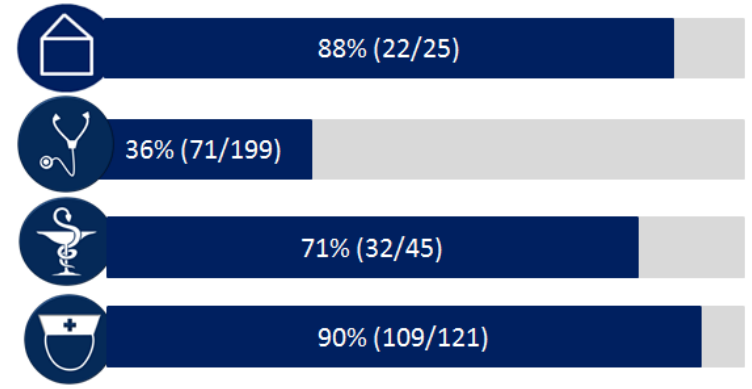
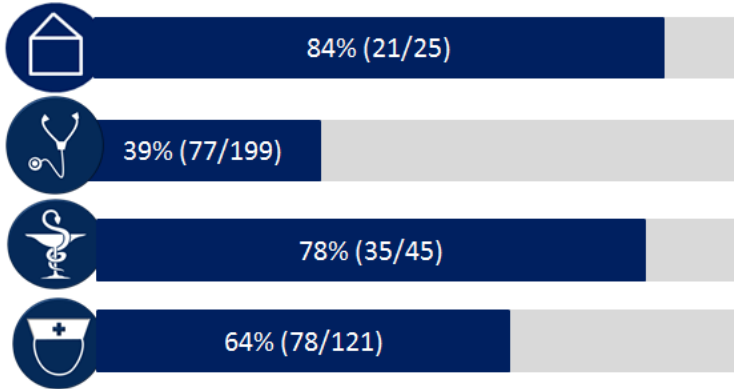
'On site' training



Specific training for pharmacists and for nurses



Participation rate blended learning: per profession



Participation rate blended learning: per nursing home



Wallonia

Flanders

1	1	1	1	1	1	1	1
4	9	1	3	4	4	1	9
5	1	1	1	1	1	1	1
5	7	1	1	3	8	3	2

MCC/CRA

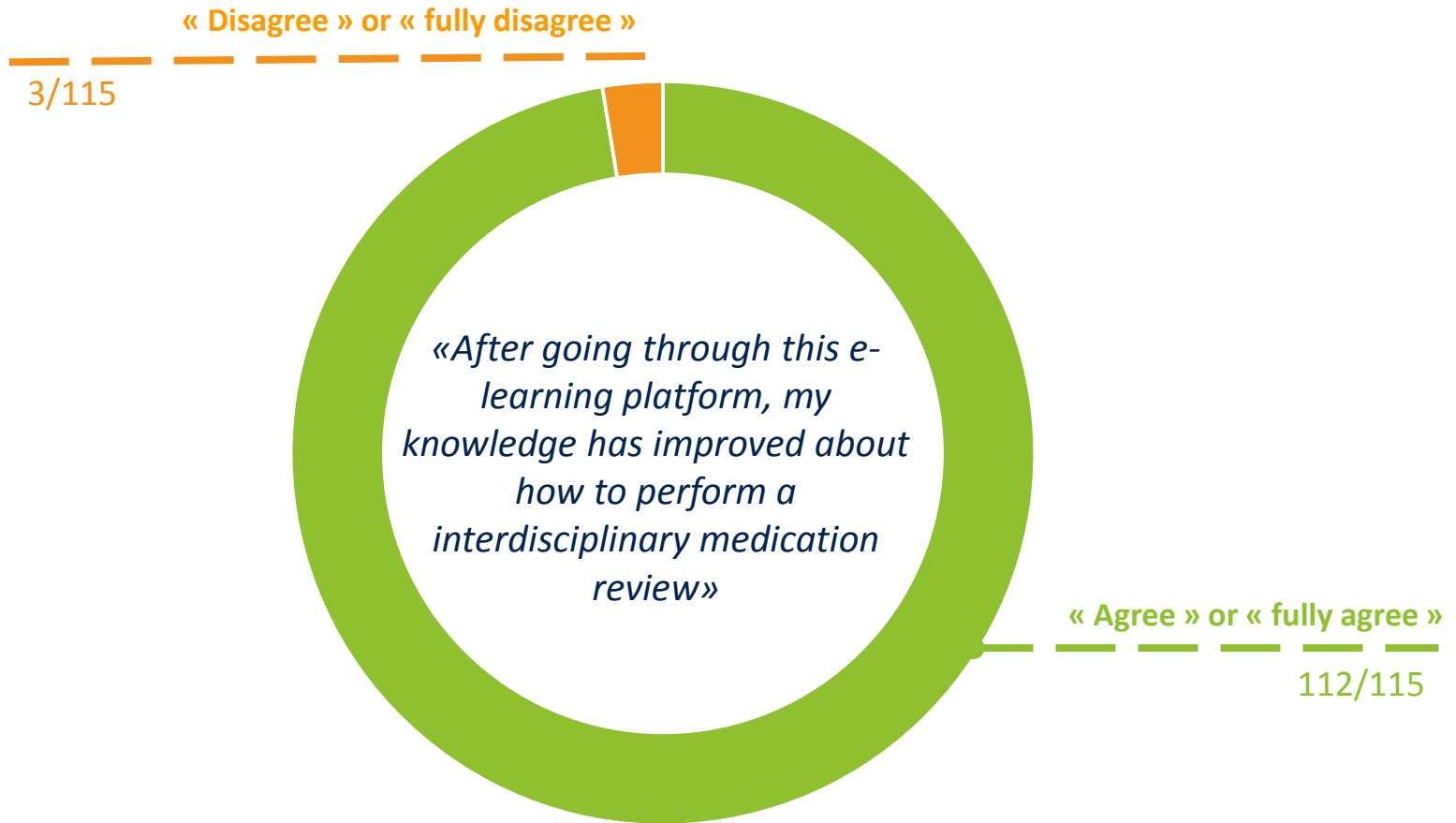
GPs

Pharm.

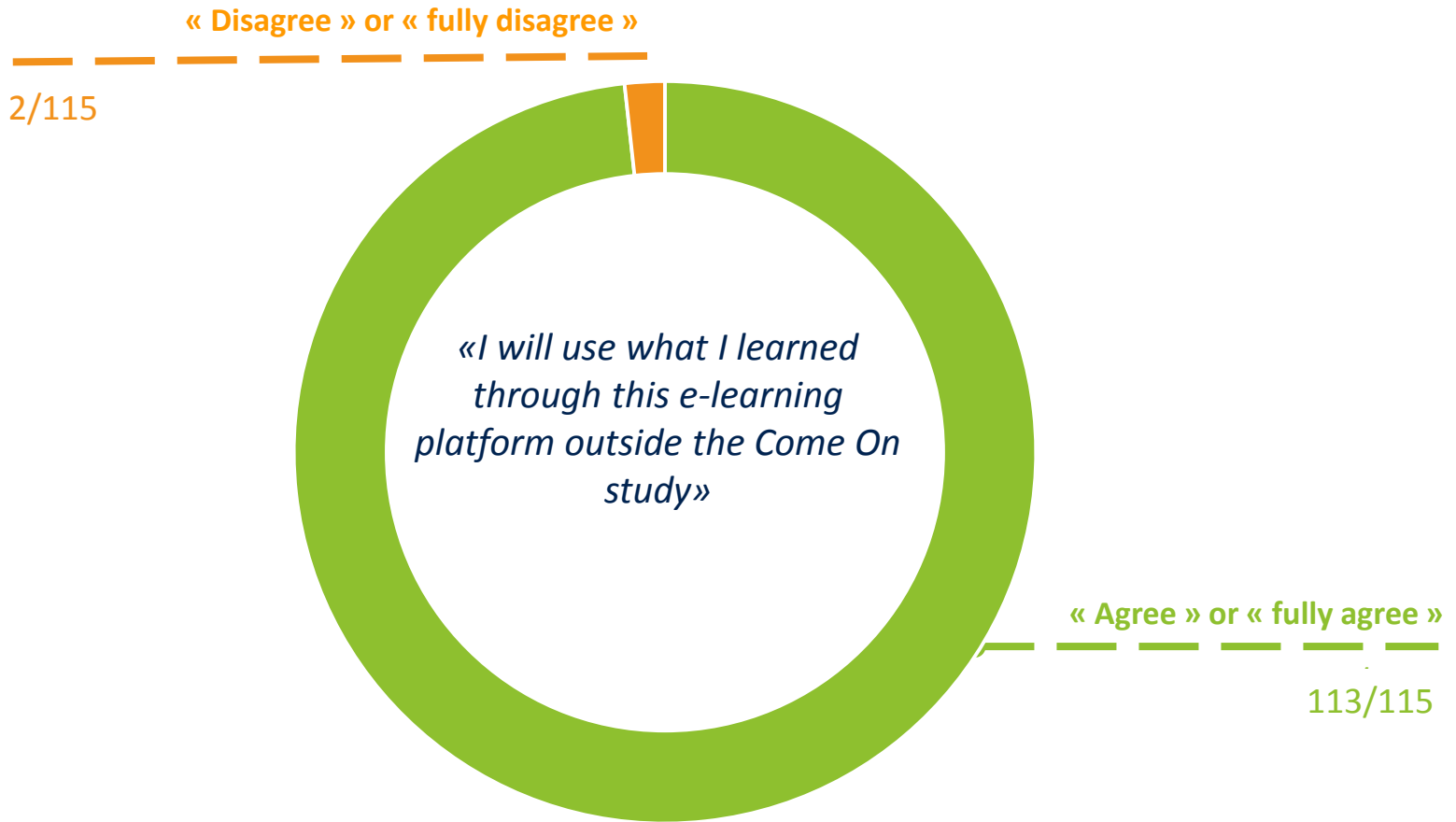
Nurses

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	0	2	3	8	4	2	3	3	10	0	5	4	11	5	9	
2	1	1	1	1	2	4	4	2	2	1	1	1	2	1	2	
5	4	2	3	3	4	8	2	2	8	7	5	5	2	7	23	

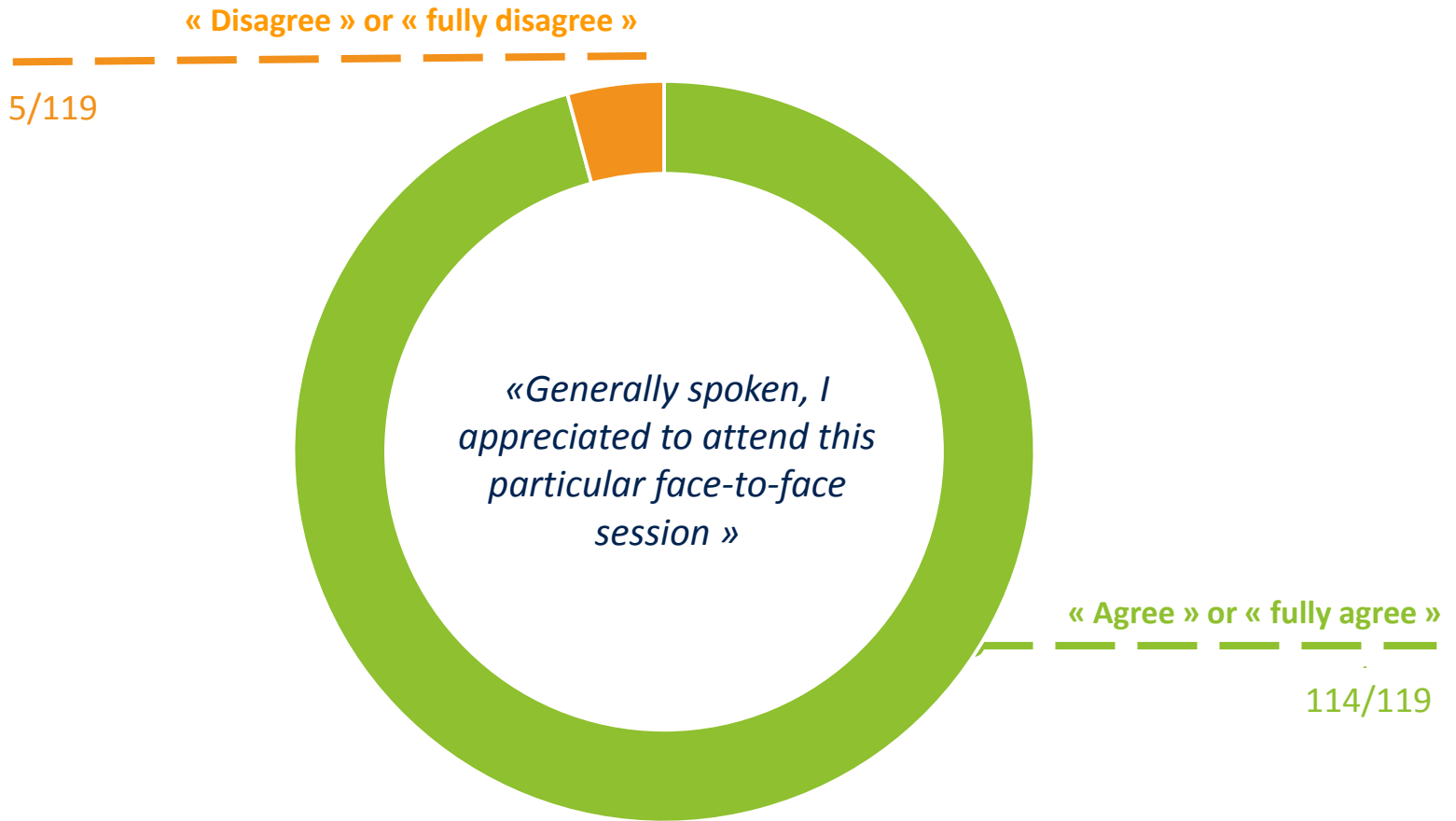
Satisfaction blended learning



Satisfaction blended learning



Satisfaction blended learning



Development of material for local concertation

Purpose of local concertation

- Initiate teamwork and communication between HCPs in the same NH
- Reach consensus on the appropriate use of one class of medication within each NH
- Evaluate implementation of consensus and adapt where needed



Local concertation within Come On

- Material developed
- Minimum 2 local concertations



Development of algorithm to detect PIMs and PPOs

Primary outcome

Difference of PIMs/PPOs between baseline and end of study between intervention and control group

Identification of potentially inappropriate medication (PIMs/PPOs) using:

- STOPP criteria (version 2)
- START criteria (version 2)
- Beers criteria (2015)

Development of an algorithm for the automatic detection of PIMs/PPOs within the database

Validation by experts (geriatricians, general practitioners, pharmacists)

Integration of DRP tool in software to support case conferences

Come-On Studie
Handleiding webapplicatie
Multidisciplinair patiëntenoverleg
Interventiegroep - Vlaanderen



Landers, Yvette - Multidisciplinair Overleg

Terug naar overzicht

Overleg afsluiten en nieuw dossier openen

Geboorte van het overleg: 21/05/2015 20:30
Duur: min.
Soort overleg: min Voorbereiding
Categorie: €
Zorgverlener toevoegen

Geneesmiddelgebonden problemen

Datum	Geneesmiddel	Andere geneesmiddelen	Type probleem	Oorzaak van het probleem	Interventie
18/04/2015 (overleg)	METFORMINE SANDOZ 500MG TABL 10X50MG		P Potentieel	C2 Dosis te hoog	36 Dosisvermindering
18/04/2015 (overleg)	METFORMINE SANDOZ 500MG TABL 10X50MG		Dosis gehalveerd		
18/04/2015 (overleg)	METFORMINE SANDOZ 500MG TABL 10X50MG		H Manifest - Actueel	A2 Geen indicatie (geen gedocumenteerde indicatie, duplicatie/simulatie dubbelmedicatie, verandering van therapeutische doeleindingen)	11 Definieve / tijdelijke stopzetting van de behandeling of afbouw (graduele vermindering met het oog op stopzetting)
18/04/2015 (overleg)	ISFORMOLON SANDOZ 5MG TABL 56 X 5 MG		H Manifest - Actueel	C2 Dosis te hoog	36 Dosisvermindering
18/04/2015 (overleg)	EXELON 4.0MG/24U PLEISTER TRANSDERMAL 30		P Potentieel	A2 Geen indicatie (geen gedocumenteerde indicatie, duplicatie/simulatie dubbelmedicatie, verandering van therapeutische doeleindingen)	11 Definieve / tijdelijke stopzetting van de behandeling of afbouw (graduele vermindering met het oog op stopzetting)
18/04/2015 (overleg)	EXELON 4.0MG/24U PLEISTER TRANSDERMAL 30		H Manifest - Actueel	Holteren: niet op halve brengen, maar op gans tablet van 2.5mg	
18/04/2015 (overleg)	EXELON 4.0MG/24U PLEISTER TRANSDERMAL 30		Diefagproblemen: oplaten, draaggedrag (zwerft 's nachts door de gangen)		

Geneesmiddelgebonden probleem toevoegen

Suggesties voor het overleg

- 20/05/2015 Peter Arkman: EXELON 4.0MG/24U PLEISTER TRANSDERMAL 30 Redingsprobleem: ichtere, desgehoeg (zwerft 's nachts door de gangen) Na overleg blijkt geen probleem te zijn.
- 20/05/2015 Caroline Heilbrunn: valincidenten Te laagrisico op overleg Omgezet naar geneesmiddelgebonden probleem op 20/06/2015 W

Geneesmiddelgebonden problemen van het vorige overleg

Datum Geneesmiddel Andere geneesmiddelen Type probleem Oorzaak van het probleem Interventie Implementatie

Results on...

BASELINE

- Medication use
- Appropriateness of prescribing
- Influencing factors

IMPACT OF INTERVENTION

- Appropriateness of prescribing
- Medication use
- Clinical outcomes (hospitalisation, death)
- Cost

PROCESS EVALUATION

- Case conferences
- Local concertation
- Training

Aim = validated recommendations

Thank you for your attention



Q&A



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- **Co-supervisor: Prof. Anne Spinewine**
- **PhD researchers: Goedele Strauven and Pauline Anrys**
- **COME-ON consortium:**
 - Boland B., De Lepeleire J., Degryse J.M., Lacour V., Simoens S., Henrard S., Declercq A., Vanhaecht K., Dalleur O., Macq J., Speybroeck N., Van Durme T.
- **NIHDI**
- **Pilot study: participants**
- **E-learning: actors, experts,...**
- **HCPs and NHRs of participating NHs**
- ...



COME . ON

**Collaborative approach to Optimise
MEdication use for Older people in
Nursing homes**