

The FDI-ICHOM Adult Oral Health Dataset: applications and implications for improved oral health outcomes

Professor David M. Williams
Professor of Global Oral Health,
Bart's and the London School of Medicine and
Dentistry,
Queen Mary, University of London

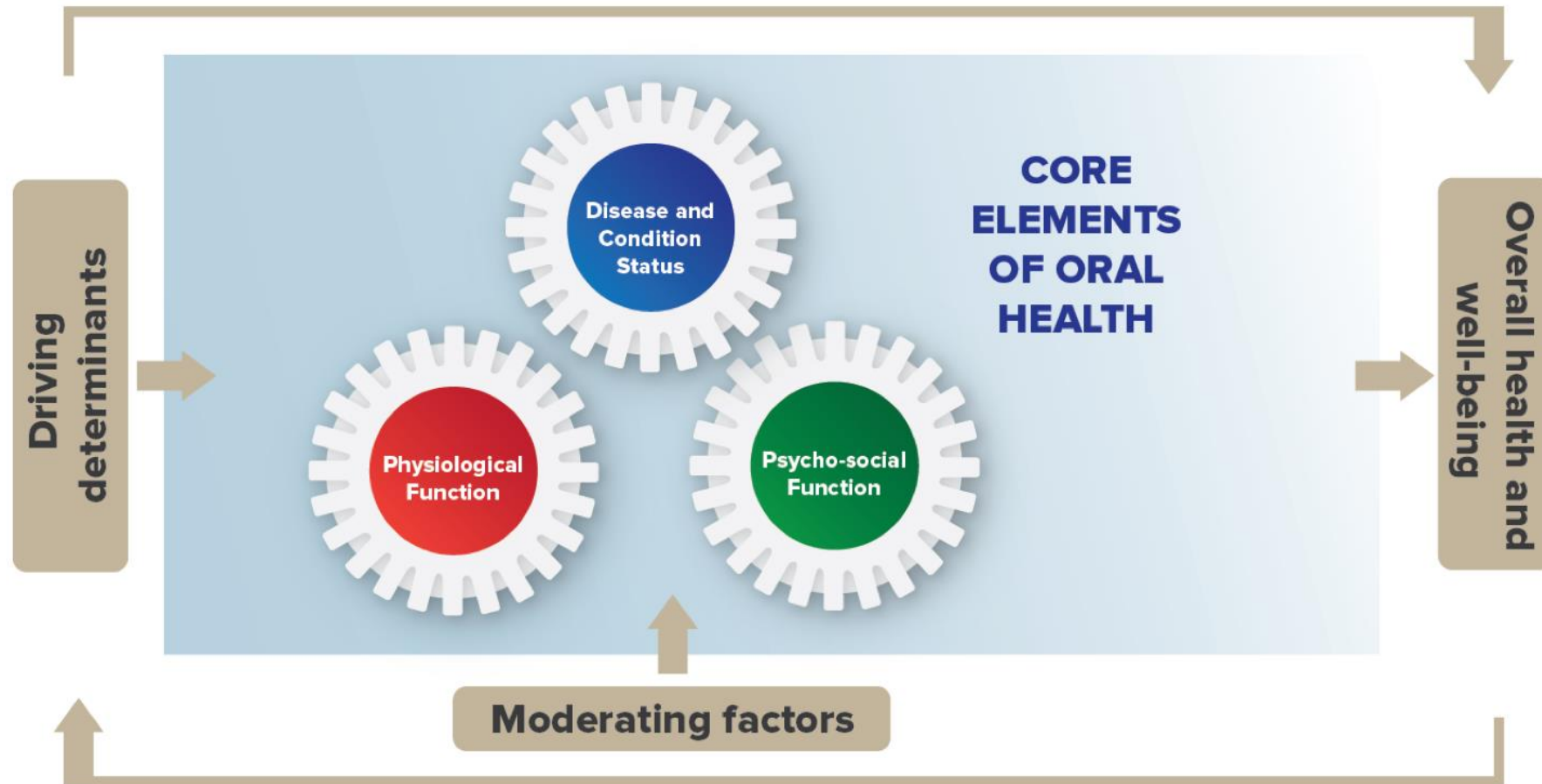
Five practical actions for Europe.

- Identify key knowledge gaps and target priority areas
- Implement what we know to be effective
- Integrate oral health messages into all health promotion strategies
- Recognise the importance of partnership across disciplines.
We need to get out of our silos – and our comfort zone
- The role of civil society. Working with our communities.

The FDI definition of oral health

Oral health is multi-faceted and includes, but is not limited to, the ability to speak, smile, smell, taste, touch, chew, swallow and convey a range of emotions through facial expressions with confidence and free of pain or discomfort, and disease of the craniofacial complex.

Framework for oral health

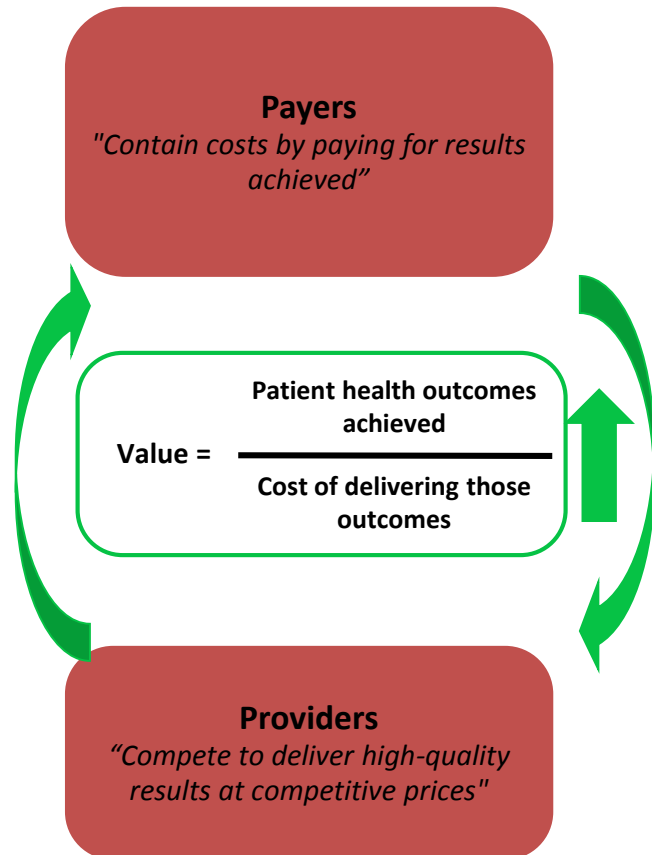


Collaboration with ICHOM

- In late 2016 FDI was approached by the International Consortium for Health Outcomes Measurement (ICHOM).
- ICHOM is an independent, not-for-profit organization dedicated to support value-based healthcare, by facilitating the measurement and comparison of healthcare outcomes. They had just announced a project aimed at developing a standard set of oral health outcome measures.
- A formal collaboration was approved to **develop a standard set of outcome measures for oral health.**
- The latest version of the Adult Oral Health Outcomes Standard Set was presented at the FDI World Dental Congress in Buenos Aires on 3 September 2018. The paper based on the final version will be submitted for publication later this year.

ICHOM: value-based health care

ICHOM believes in a model where value is at the center of health care...



... which will impact every stakeholder



Patients will **choose their provider** based on its expected outcomes and their share of the cost



Providers will **differentiate** into areas where they deliver superior outcomes at competitive prices

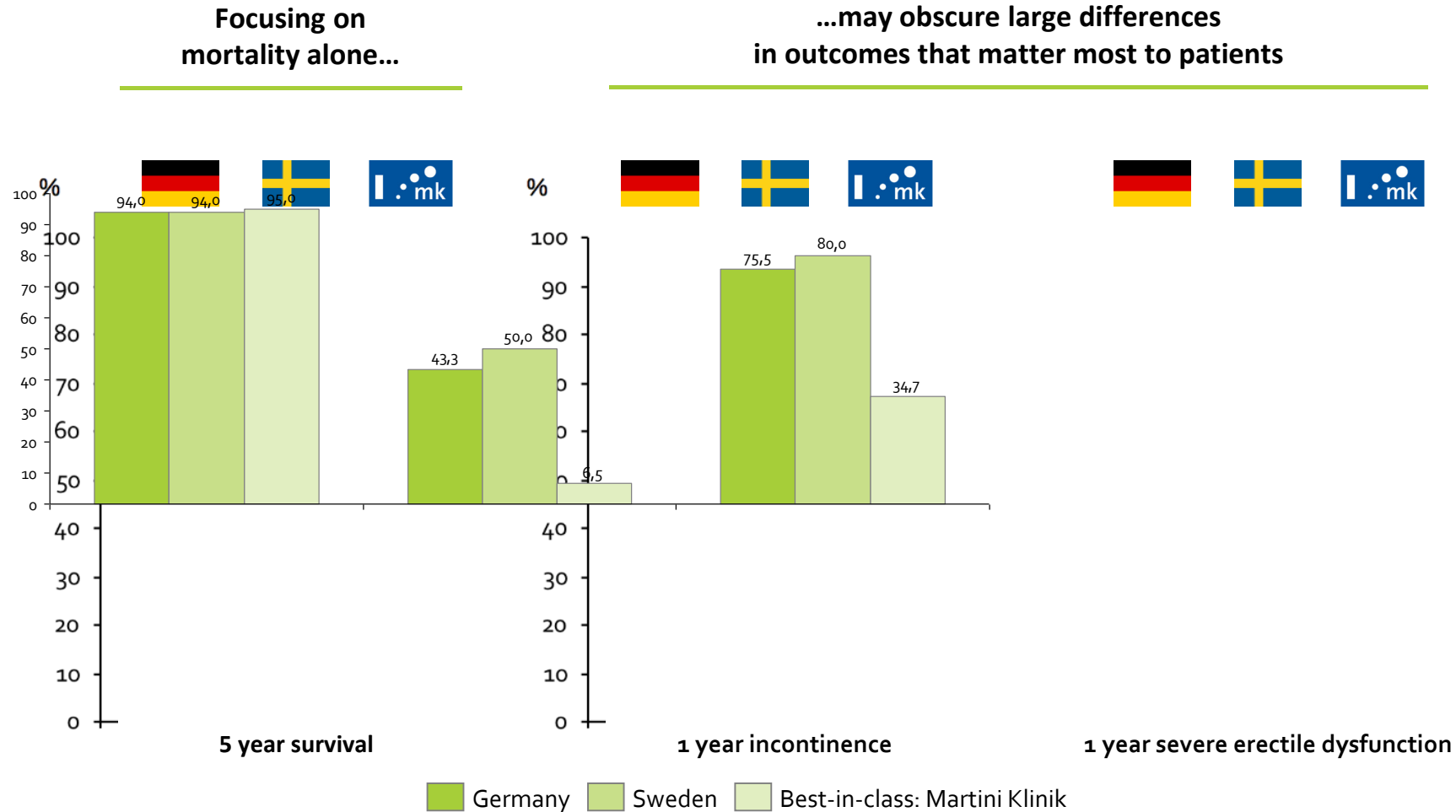


Payers will **negotiate contracts based on results** and encourage innovation to achieve those results



Suppliers will **market their products on value**, showing improved outcomes relative to costs

Why measuring and reporting outcomes matters



Swedish data rough estimates from graphs; Source: National quality report for the year of diagnosis 2012 from the National Prostate Cancer Register (NPCR) Sweden, Martini Klinik, BARMER GEK Report Krankenhaus 2012, Patient-reported outcomes (EORTC-PSM), 1 year after treatment, 2010

ICHOM is supported by the health care community

STRATEGIC PARTNERS



PLATINUM



GOLD



SILVER



BRONZE



*As of August 2016

ICHOM: 21 Standard Sets completed, covering 45% of the disease burden



2016-2017 commitments

1. Chronic kidney disease
2. Oral health
3. Inflammatory arthritis
4. Congenital hand and upper limb malformations
5. Facial palsy
6. Hypertension*
7. Diabetes
8. Atrial fibrillation

In discussions to launch

1. Mental health package
2. Overall adult health
3. Overall child health
4. Pediatric epilepsy

Numbers not representing prioritization/ likelihood

*Focused on low and middle income countries

Aim and expected outcomes

Aim

- To develop an ICHOM-FDI adult set of measures that will enable the evaluation and monitoring of oral health.

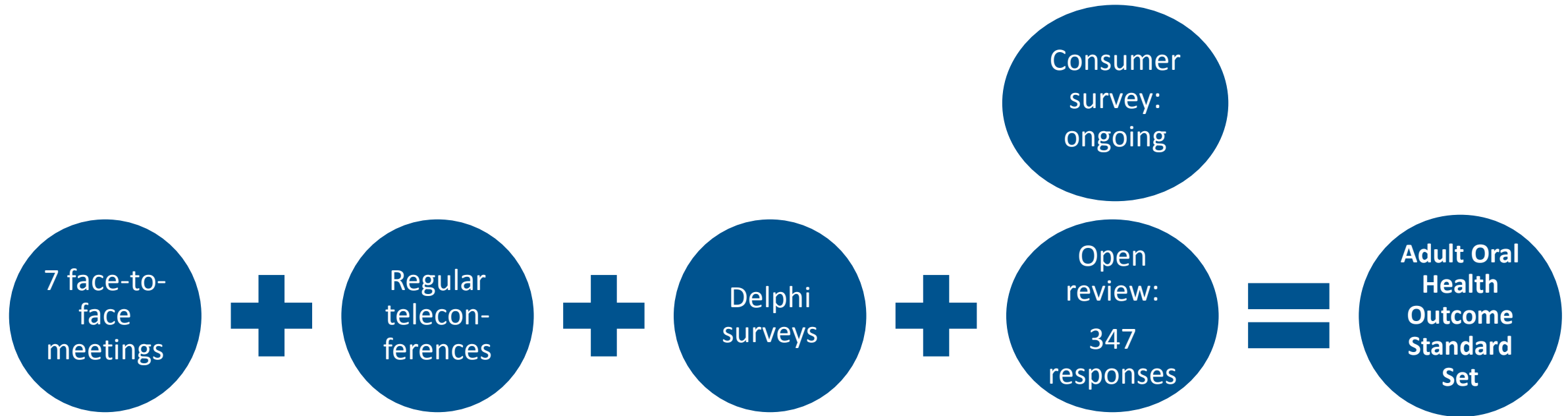
Expected outcomes

- A consensus-based Adult Oral Health Outcome Standard Set (AOHOSS).
- A peer-reviewed publication with a focus on the methodology employed to develop a consensus-based AOHOSS

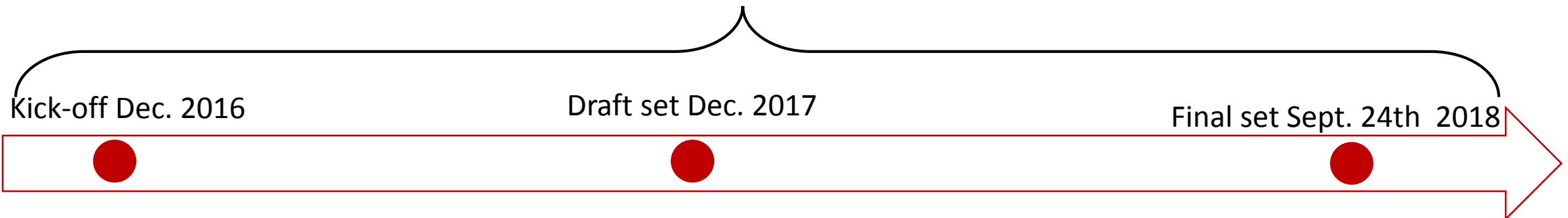
Benefits of the AOHOSS

Patients	Clinicians	Policy-makers	Researchers	Third-party payers
Verbalizing oral health	Initiate dialogue with patient	Advocacy	Surveys	Basis for communication
Patient empowerment	Better informed patients as co-decision-makers		Influencing policy-makers	Paying for value, not activity
Improved OH awareness	Dialogue with other health professionals, policy-makers and researchers Why OH matters			
Oral health literacy	Being perceived as a caring and compassionate practitioner			
OH as an attribute/asset Improved OH Contributes to well-being	PATIENT CENTRED CARE More comprehensive understanding of the patient perspective, experience and expectations Competitive edge			
Common language for all stakeholders				

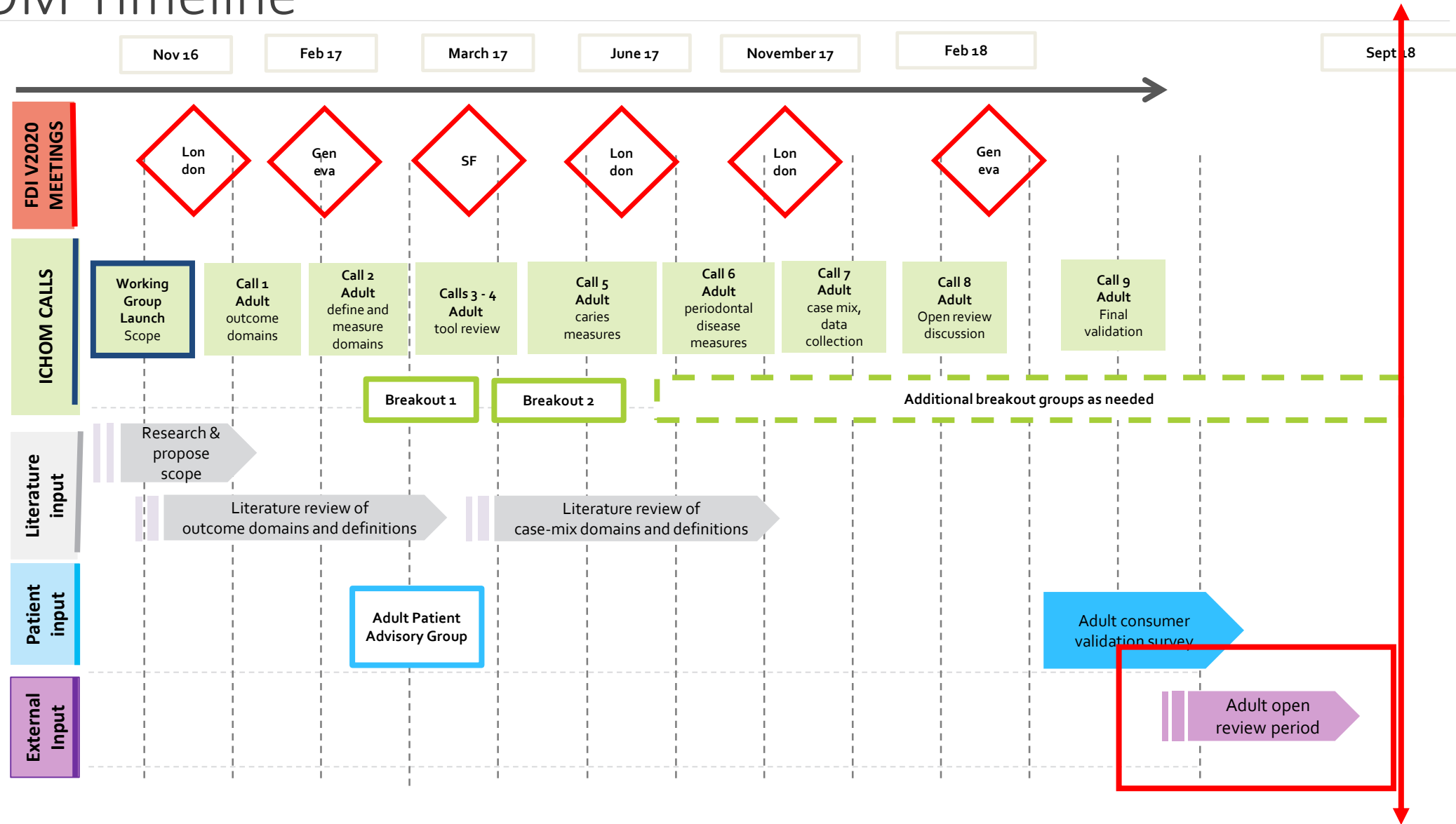
Project methodology and workload



More than 2,500 hours of collective work



FDI-ICHOM Timeline



Open review: participation and feedback

Open review results: Response summary



347 Responses

ICHOM: 71.2%
FDI: 28.8%



Diverse Sectors

Oral Health Professional (67%),
Researcher (13%), Educator (8%), Policy
(6%), Other (3%), Advocacy (1%), Industry
(1%)



5 Languages

English: 89% German: 2%
Spanish: 6% Arabic: 1%
French: 2%



Follow-up Requests

93% of respondents would like to
receive a copy of the finalized Set



87 Countries



Implementation Interest

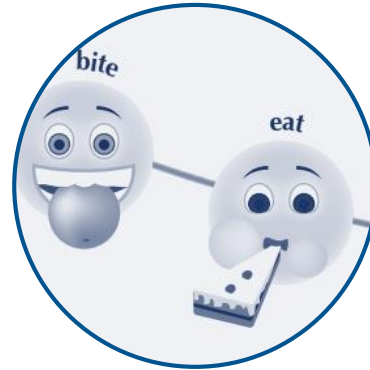
82% of respondents would like to
implement collection of the final Set in
their local settings

Core outcome domains



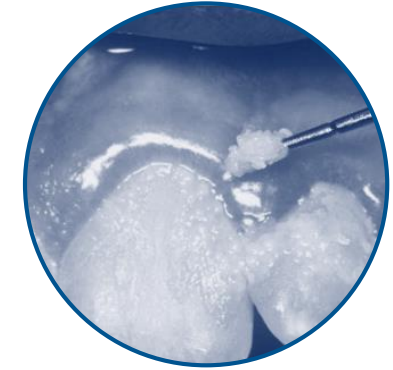
Psychosocial function

General OH status
Self-confidence
Ability to eat
Food alteration
Ability to speak



Physiological status

Ability to sleep
Social participation
Aesthetic satisfaction
Productivity










Disease and Condition status

Dry mouth
Sensitivity
Oral pain
Caries
Periodontal disease
Bleeding on probing

} Patient
reported

Physiological Status/Psychosocial Function

Measure	Question & response option	Feedback	
		Professionals	Patients
General Oral Health Status	How would you rate your oral health today?		<i>Change "oral health to patient friendlier "mouth, teeth and gums"</i>
Patient Satisfaction	To what extent are you satisfied with the dental care you received?	<i>... satisfied with you oral health</i>	<i>Agree. Change "oral health" to "mouth, teeth and gums"</i>
Self-confidence	To what extent did you feel nervous or self-conscious because of problems with your teeth, gums, or dentures?		
Ability to eat	To what extent have you have difficulty eating food due to problems with you mouth teeth, or dentures?		
Alteration	To what extent did you change your food/drinks that you usually consumed because of problems with your mouth, teeth, or dentures?		

Physiological Status/Psychosocial Function

Measure	Question & response option	Feedback	
		Professionals	Patients
Ability to speak	To what extent have you had difficulty speaking clearly due to problems with your mouth, teeth, or dentures?	✓	✓
Ability to sleep	To what extent have you had difficulty sleeping clearly due to problems with your mouth, teeth, or dentures?	✓	✓
Social Participation	To what extent have you had difficulty enjoying the contact of, or interact with, other people due to problems with your mouth, teeth, or dentures?	✓	✓
Aesthetic Satisfaction	To what extent were you pleased or happy with the look of your teeth, gums, or dentures?	✓	✓
Productivity	To what extent have you had difficulty carrying out your usual work, job, or tasks due to problems with your mouth, teeth, or dentures?	✓	✓

Disease and Condition Status: General

Measure	Question & response option	Feedback	
		Professionals	Patients
Dry Mouth Experience	Are you bothered by a feeling of dry mouth? (Y/)	✓	✓
Oral Pain	To what extent have you had pain in your mouth?	✓	✓
Sensitivity Experience	Are you experiencing any sensitivity to hot or cold foods/drinks? (Y/N)	✓	✓
Mobility Experience	Do any of your teeth feel loose to you?	X	X
Mobility Grading	Record location of teeth patient indicated as feeling loose	X	X
DMFT	Collected for each tooth	X	X

Disease and Condition Status: Dental caries

Measure	Question & response option	Feedback	
		Professionals	Patients
Caries Staging	<p>Collected for each tooth (if not recorded as missing during DMFT)</p> <ul style="list-style-type: none"> • Sound – correlates to ICDAS Code 0 • Initial Stage - correlates to ICDAS Codes 1 & 2 • Moderate Stage - correlates to ICDAS Codes 2 & 3 • Extensive Stage - correlates to ICDAS Code 4 & 5 	<p><i>Missing</i></p> <p><i>Sound</i></p> <p><i>Restored (with no new/untreated disease)</i></p> <p><i>Enamel Involvement</i></p> <p><i>Dentin Involvement</i></p> <p><i>Pulp involvement</i></p>	<p><u><i>Strongly agreed with proposed revision</i></u></p>

Disease and Condition Status: Periodontal disease

Measure	Question & response option	Feedback	
		Professionals	Patients
Periodontal Disease Staging	<u>Basic Periodontal Examination (BPE); collected at sextant level</u> <ul style="list-style-type: none"> • Healthy (pristine, well maintained clinical health, periodontal stability) • Pocketing <5 mm • Pocketing 5 mm to 7 mm • Pocketing >7 mm 	✓	✓
Bleeding on Probing	<ul style="list-style-type: none"> • Bleeding on probing? (Y/N) 	✓	✓

Peer-reviewed publication

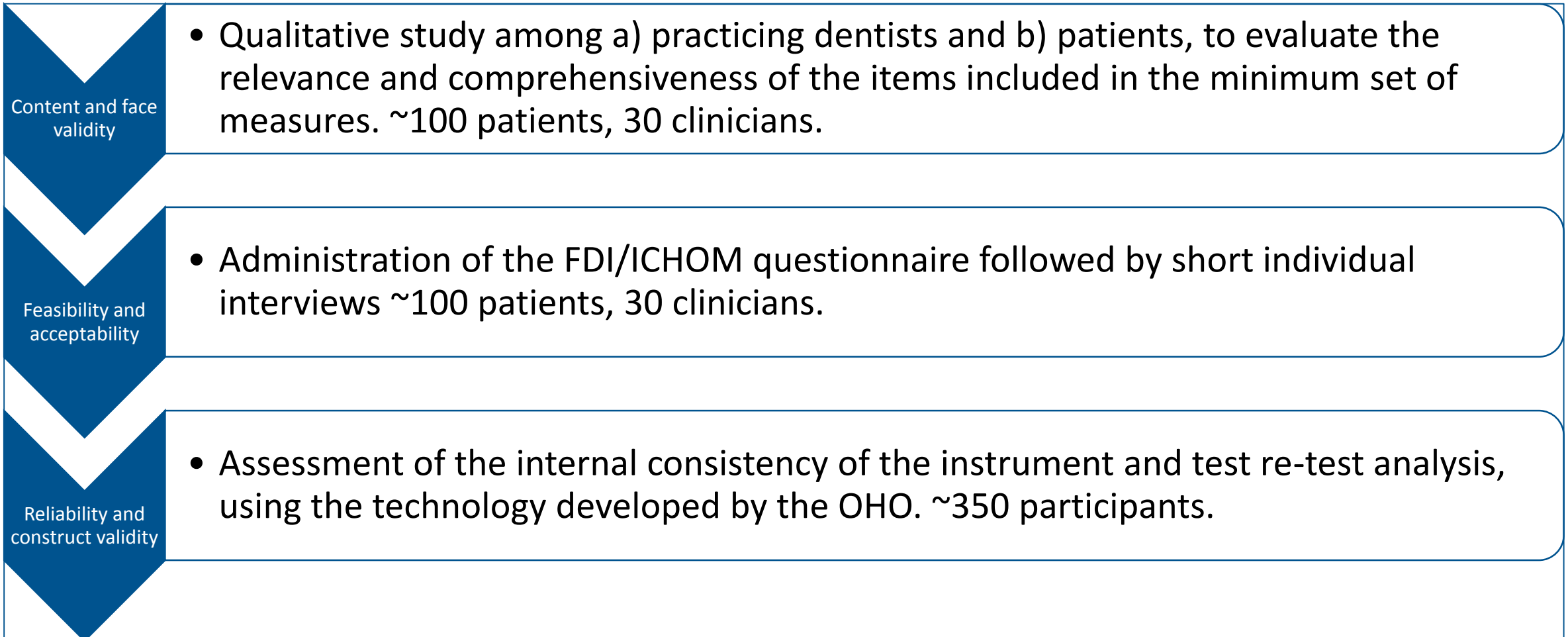
Title: Adult Oral Health Outcome Standard Set: The FDI and ICHOM collaboration

List of authors: Richeal Ni Riordain, Michael Glick, Shiamaa Shihab Ahmed Al Mashhadani, Krishna Aravamudhan, Jane Barrow, Deborah Cole, Jim Crall, Jenny Gallagher, Jacqui Gibson, Rebekah Kaberry, Elsbeth Kalendarian, Anup Karki, Roger Keller Celeste, Stefan Listl, Stacie N. Myers, Richard Niederman, Eyitope Ogunbodede, Tania Severin, Mark W. Smith, W. Murray Thomson, Georgios Tsakos, Marko Vujicic, Richard Watt, David Williams

Timeline: manuscript almost final. It will be submitted for publication following FDI/ICHOM Working Group's final voting round.

Validating the Adult Oral Health Outcome Standard Set

Validation study: Steps



Today

The definition is now being used to create a measurement tool that addresses health outcomes:

- Individuals are seen as co-producers of their own health;
- Dentists can enter into a dialogue with their patients
- Dentists can better meet patient expectations
- The attainment and maintenance of oral health can be monitored

And oral health professionals have an objective basis to enable oral health to be integrated into general health

Tomorrow

- The introduction of a robust tool paves the way for using oral health outcome measurement as the basis for remuneration schemes.
- The tool will facilitate dialogue between oral and general health practitioners, in particular with regard to NCDs.
- Forms the basis to advocate for oral health in all policies.

Thank you