A TRADITION OF INDEPENDENT THINKING

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Workforce Planning for the Ageing Population

European College of Gerodontology

Belfast
1 October 2015

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George Best

Aims

- Provide an overview of the dental challenges of managing the ageing population
- Provide an overview of the economic challenges of managing the ageing population
- Discuss educational challenges for dental schools in preparing the next generation of dental professionals
- Discuss the manpower challenges in managing the ageing population

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Dental Challenges

- Oral pathology
- Xerostomia
- Periodontal disease
- Caries
- Endodontics
- Toothwear
- Aesthetics
- Tooth Loss

- Maintenance

- Access to care

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Mrs A (2010)

- 80 year-old widow
- Biologically old
- Living alone
- Limited mobility
- Prefers less frequent visits

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Medications

Deltacortril	Prednisolone, corticosteroid anti-inflammatory effect
Aspirin	Anti-inflammatory medication
Gluocophage	Glucose-lowering drug for diabetes control
Diamicron	Gliclazide is an oral hypoglycemic
Diovan	Lowers high blood pressure
Lipitor	Statin, used for lowering blood cholesterol
Fosamax	Bisphosphonate for osteoporosis
Calichew	Dietary calcium supplement
Clonfolic	Folic acid, member of the vitamin B group

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Dental History

- Irregular attender
- Extensive treatment twenty-five years ago
- Crowns and upper chrome denture

Diet

- Restricted diet due to a lack of posterior teeth
- No meat and a restricted vegetable intake due to difficulty chewing
- 4-5 cups of tea daily with sugar and biscuits
- No xerostomia
- Brings glass of water to bed

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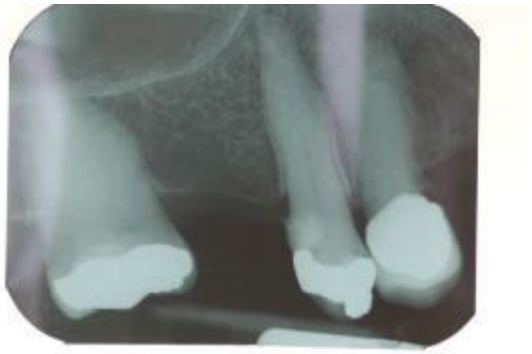

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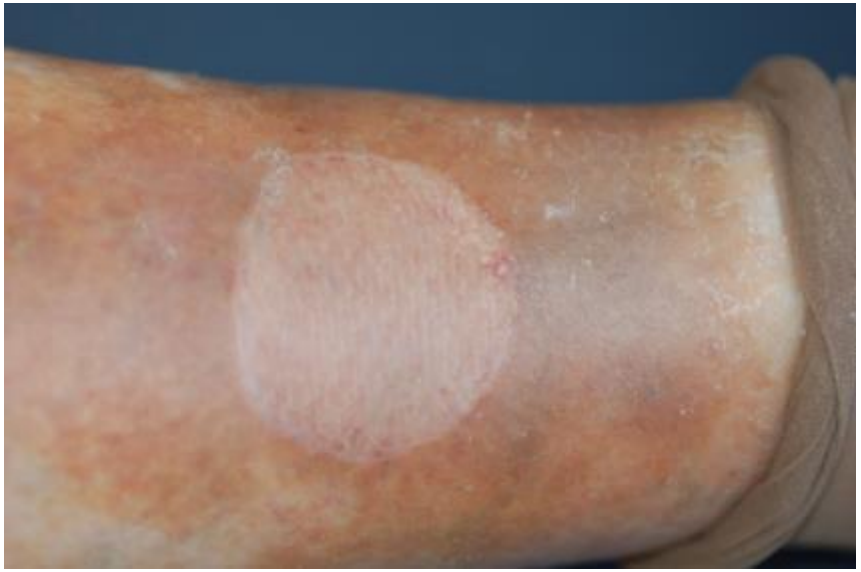

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Mrs A (2015)

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Mr B

82 year-old male

Biologically young

Controlled high blood pressure

C & B USA/Israel 25-30 years ago

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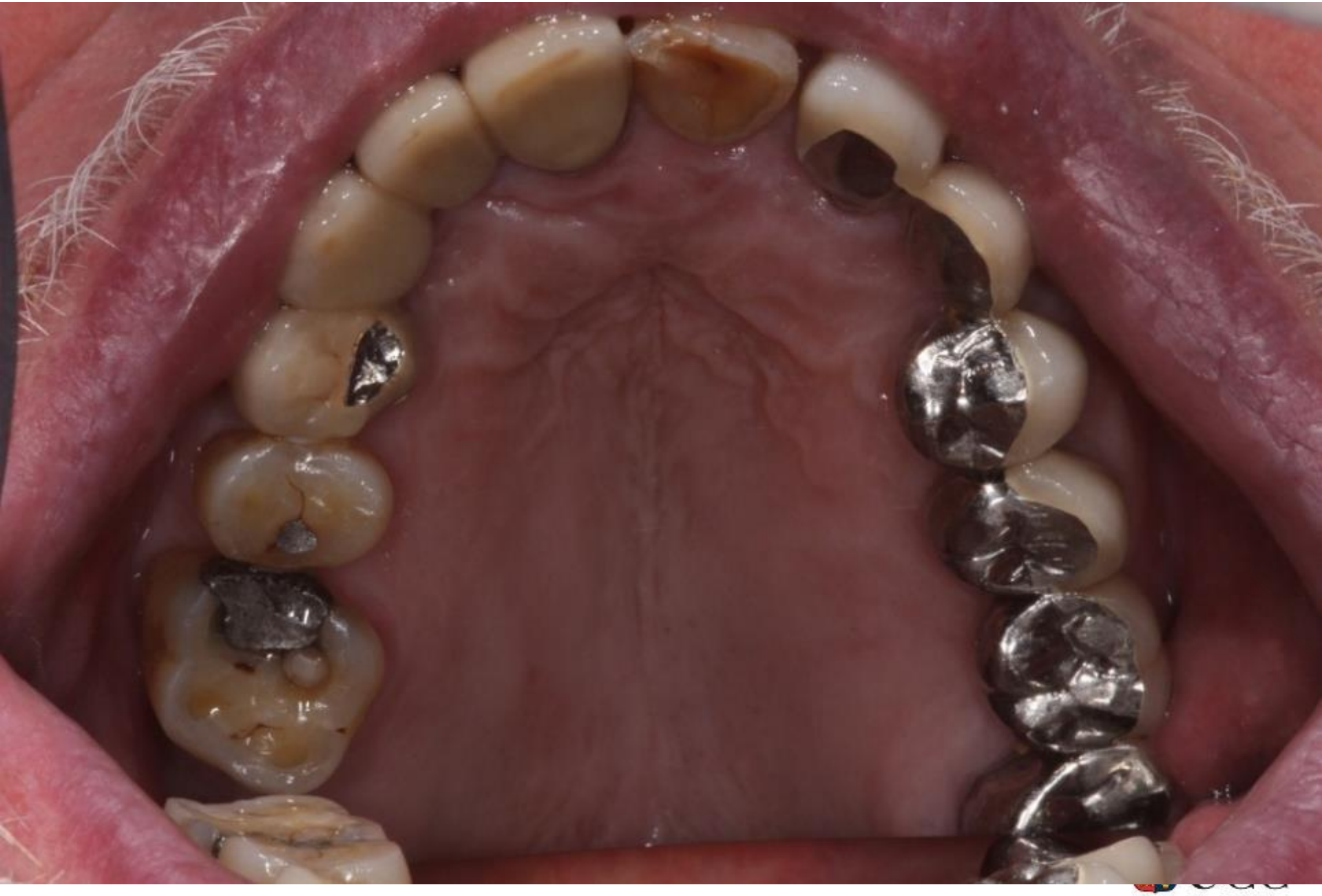

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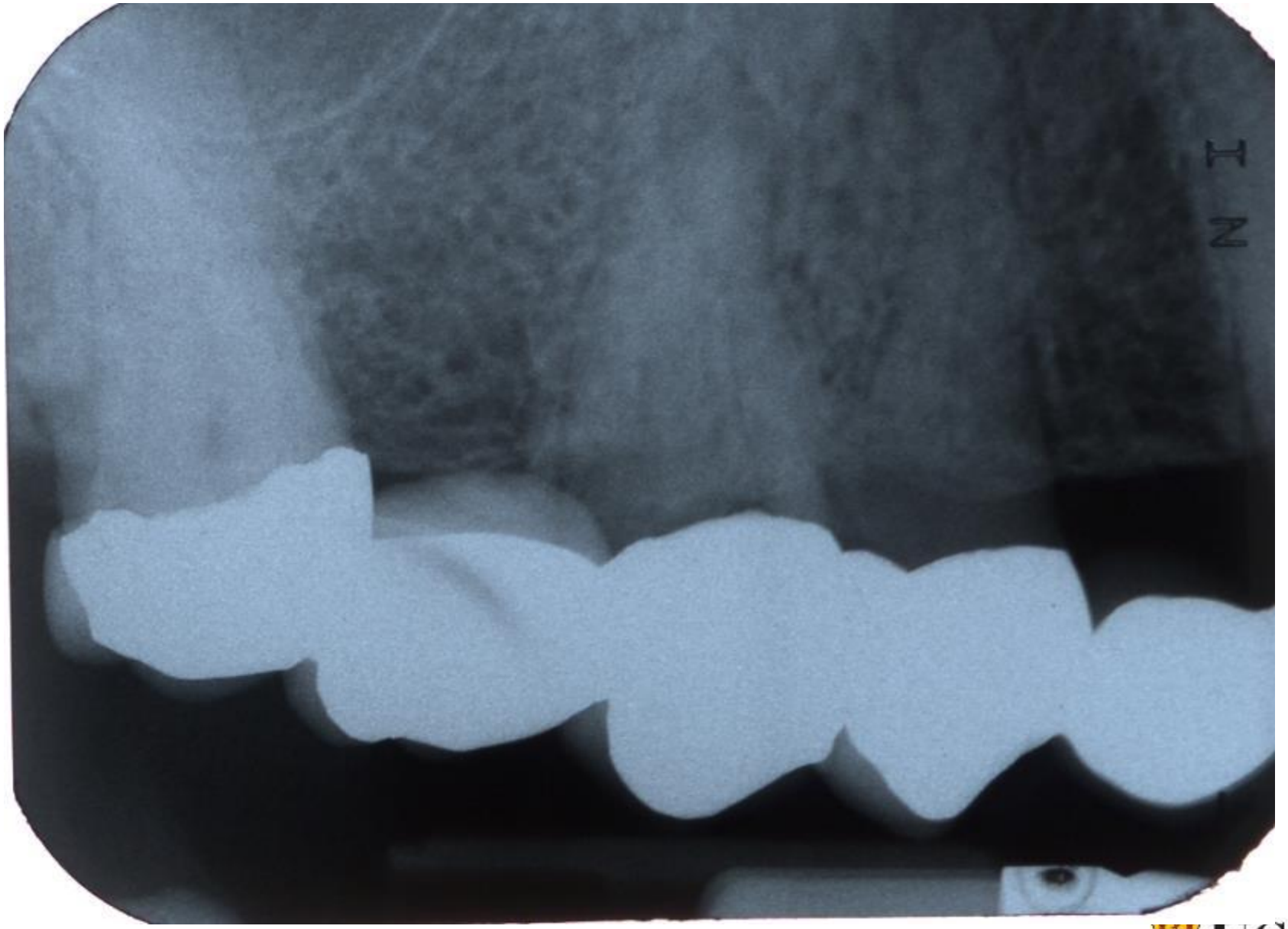

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Mr P

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2024….

- Partial dentate
- Dentate
- Edentulous

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2024….

- Toothwear
- Fixed prostheses
- Cosmetic dentistry
- Variety

- Maintenance
- Access

- Medical conditions
- Finance

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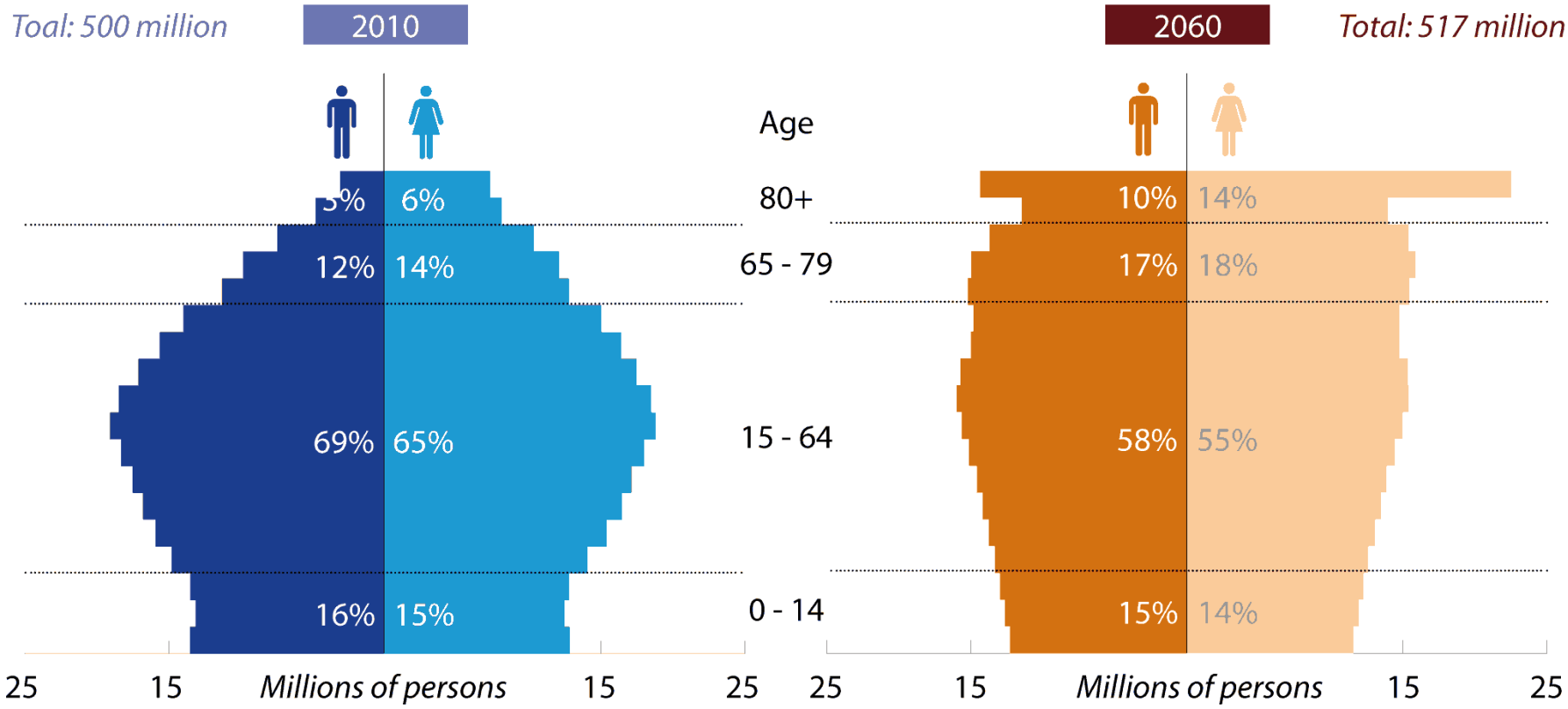
EU27 population by age and sex



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Japan's "Catastrophic Success"

2015 127 million

2060 87 million

65+ 40%

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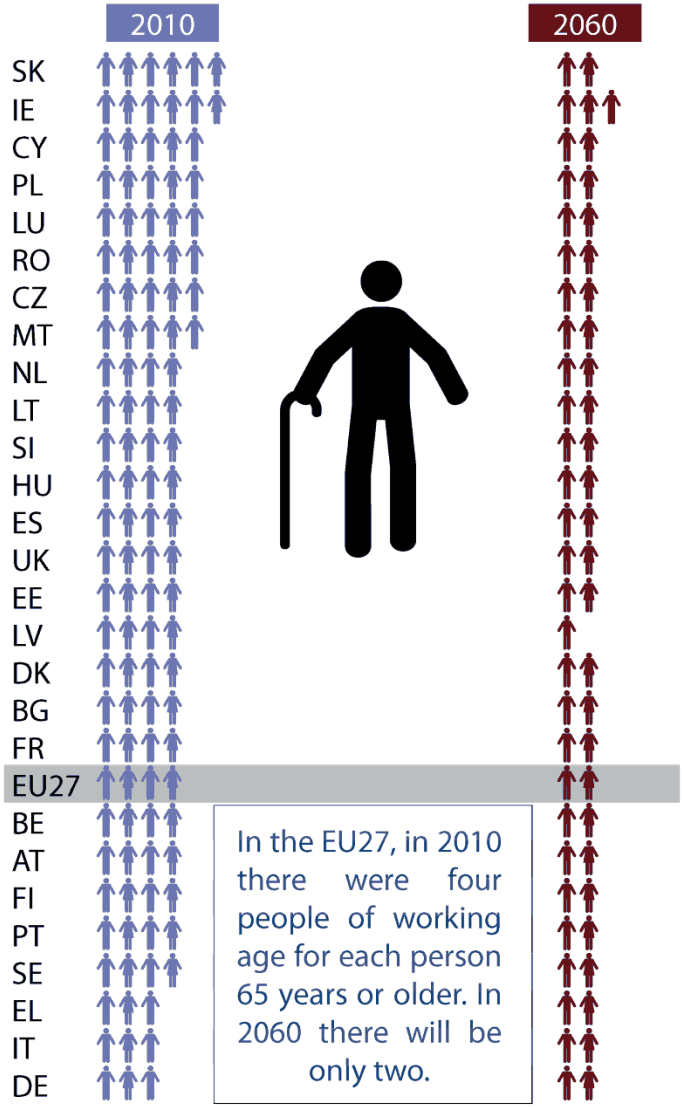
Old-age dependency ratio (65+/(15-64))

Number of people of working age for each person 65 years or older



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Care Home Population

Age	%
65-74	0.6
75-84	2.8
85+	13.7

EnglandAndWales2011

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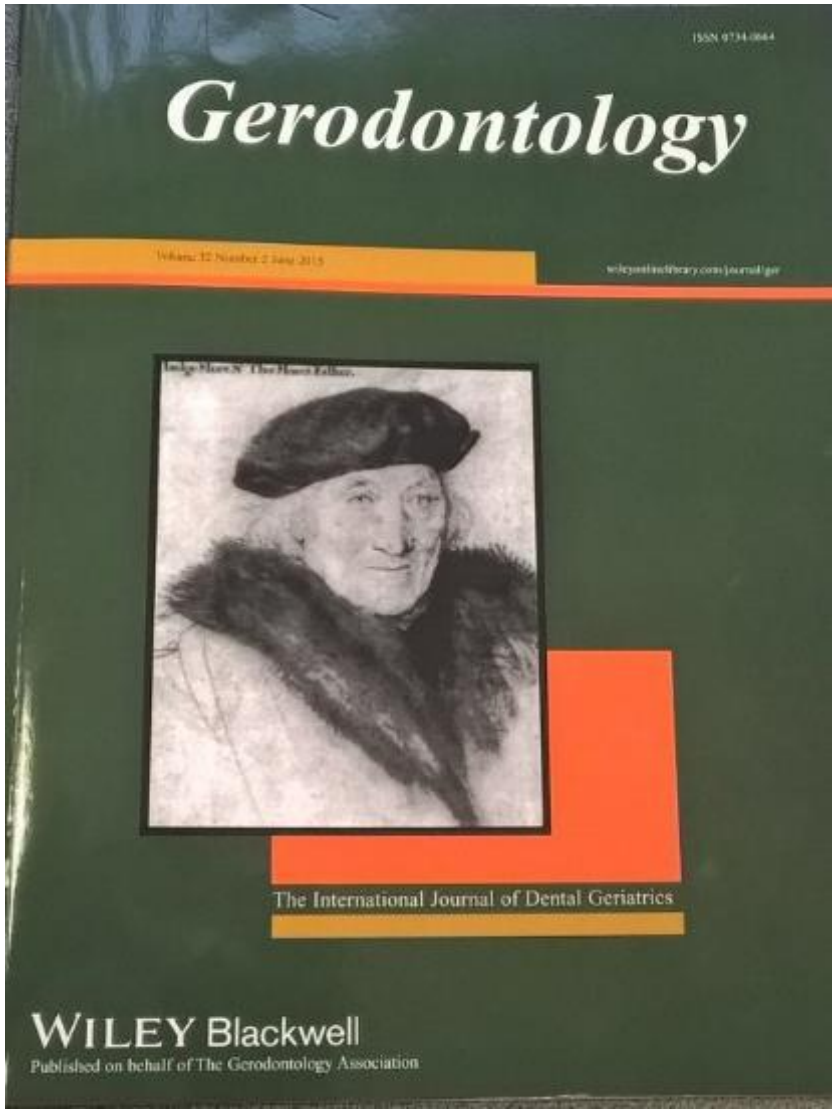
Cost Per Annum (€)

Nursing home	44 000
Homecare	7 000
Home help	3 900

FairDealNursingHomeSupportScheme2015



Who's picking up the bill?

McKenna G, Allen F,
Schimmel M, Müller F

Gerodontology 2015;
32:161-162.

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Finance

Oral disease accounts for 5% of public health spending in EU

2000 €54 billion

2020 €93 billion

More than treatment of stroke & dementia

The Context

Those 50+ years experiencing income-related barriers to preventive oral health care.

Listl 2011

Little health economics research has been targeted towards Dentistry

Shariati et al.2013

Lack of coherence in policymaking or evidence-based guidelines for oral disease prevention in older people

Peterson et al.2010

Funding

"There is a need for economical re-routing so that practices can survive on maintaining dental health and not only be operative procedures"

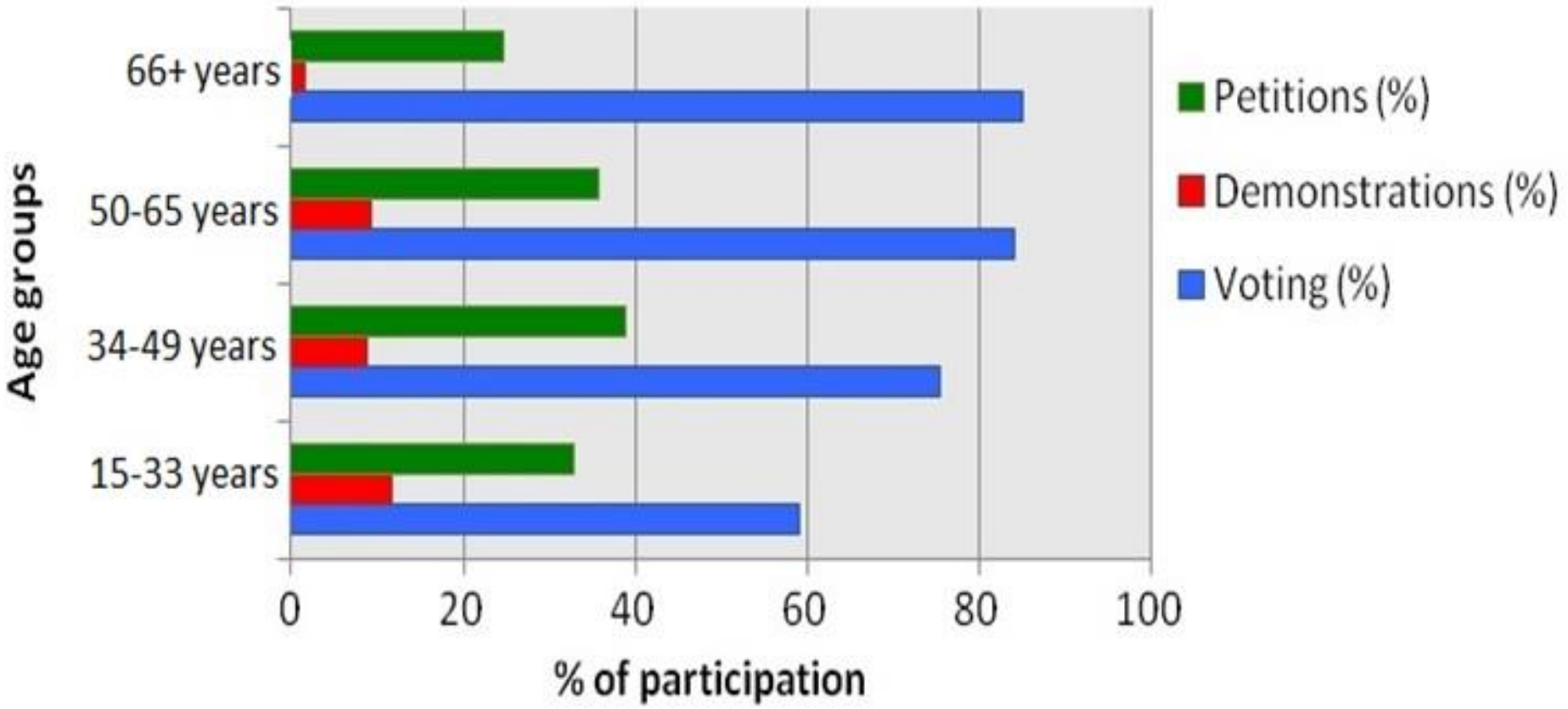
Ericson 2007

"….both dentists and hygienists felt the remuneration system…acted as a barrier"

Forbes et al. 2015

"Remuneration systems should reward minimally invasive rather than complicated procedures"

McKenna et al. 2015



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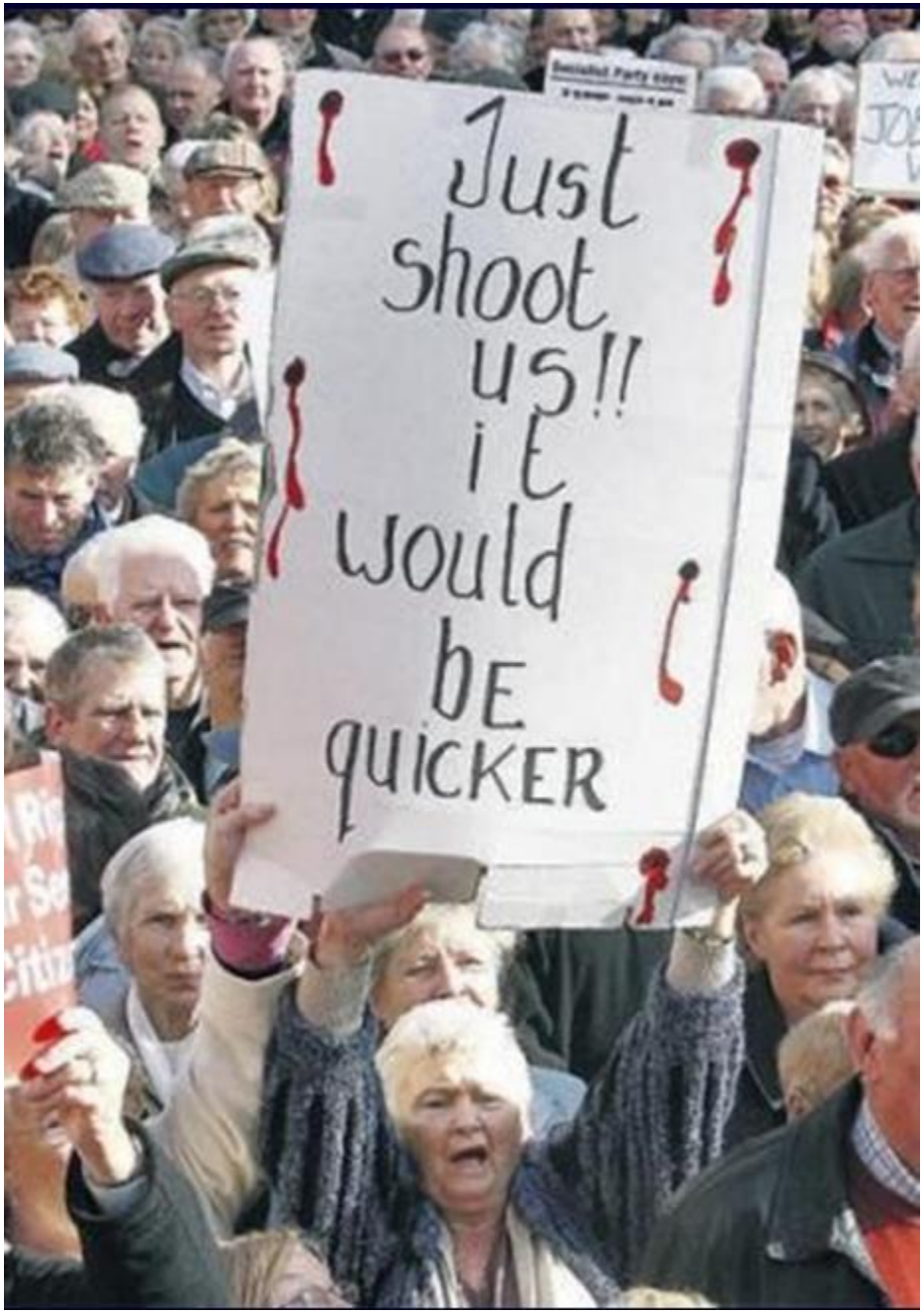

2011 election

88% of 65+ voted

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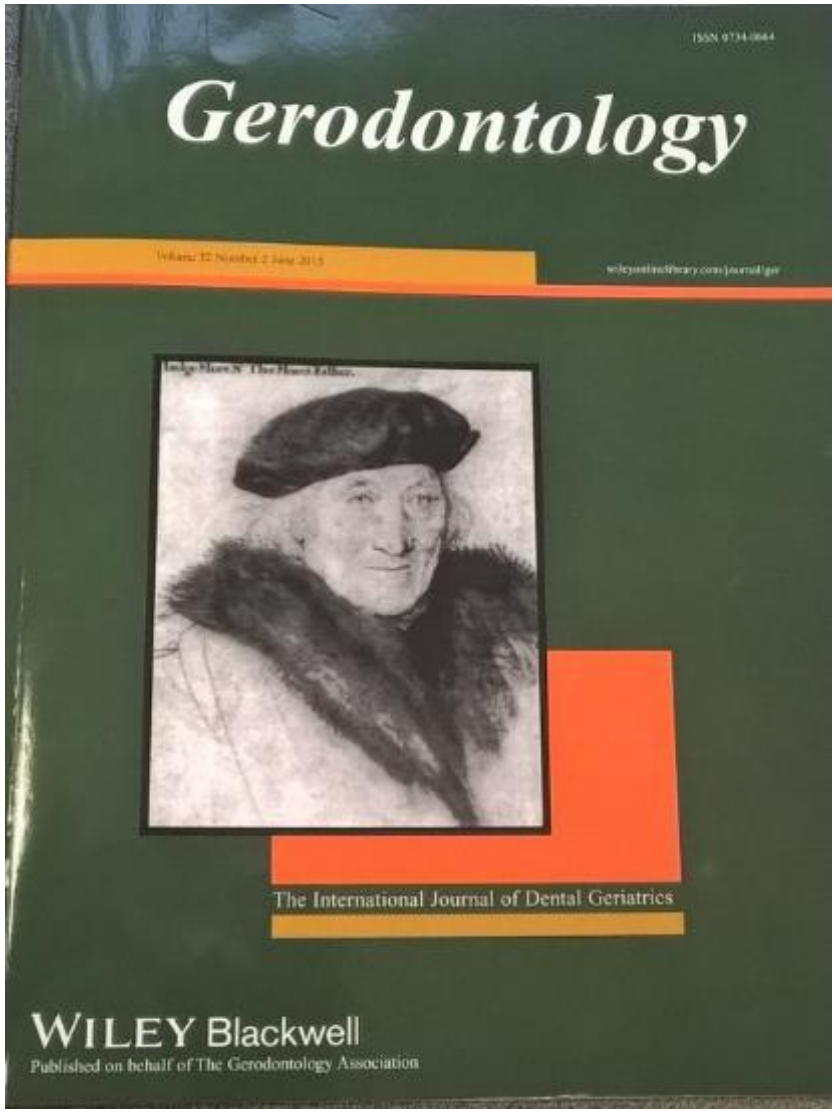

European College of Gerodontology: undergraduate curriculum guidelines in Gerodontology

Anastassia Kossioni, Jacques Vanobbergen, James Newton, Frauke Müller and Robin Heath

Gerodontology 2009:**26;**165-171

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Gerodontology

Discipline

or

Integrated?

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Educational Challenges

- Crowded curriculum
- Imagination
- Resources
- Advocacy
- National/Pan-national landscape

How will we change?

- Incremental
- Build on existing programmes
- Evidence base
- Workforce
- Lack of data for manpower planning
- Academic workforce model

What will we teach?

- Whole patient care
- Bidirectional relationship
- Prevention
- Evidence base
- Pragmatic

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Pragmatic

Replace or repair?

Plan for failure

MID

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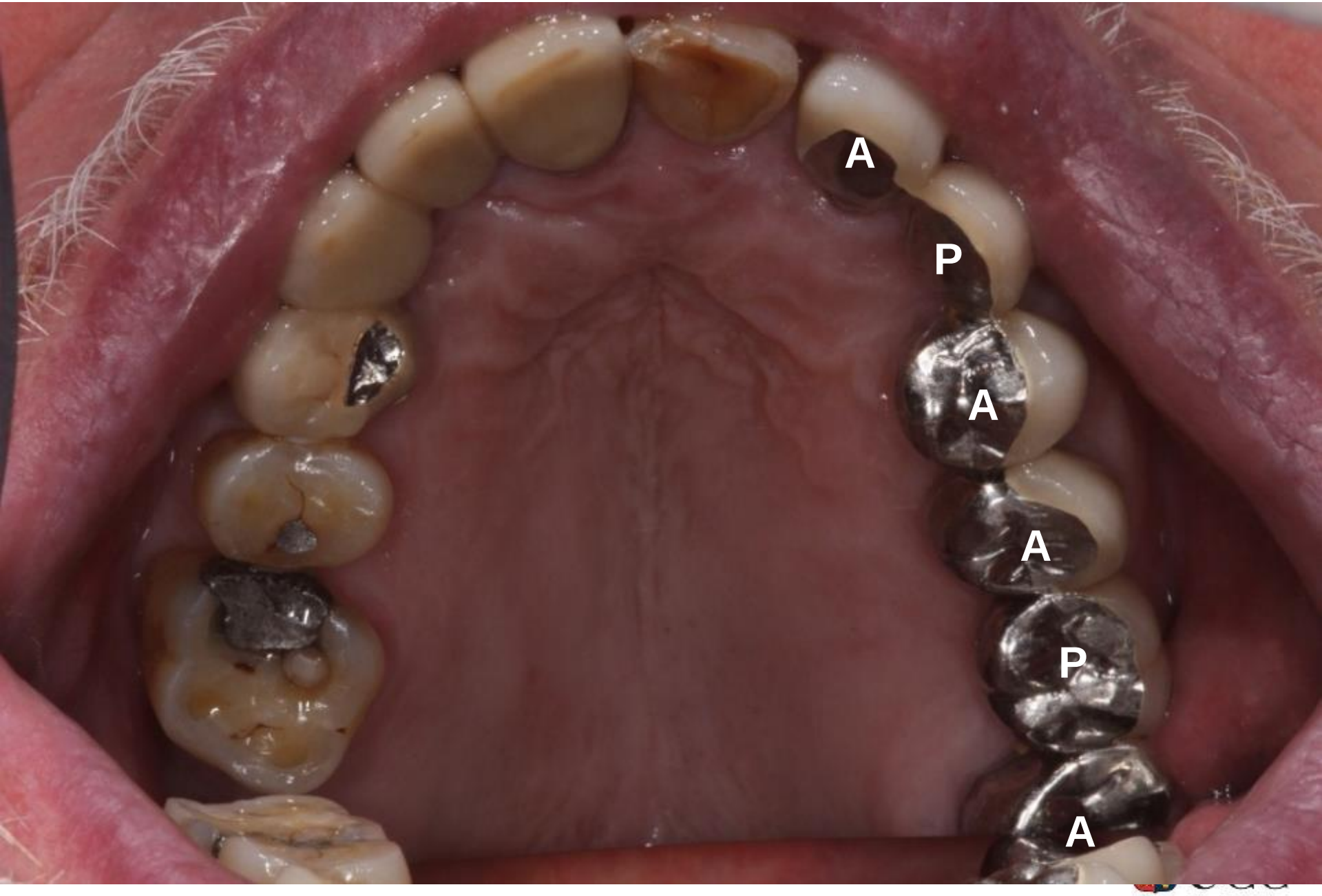
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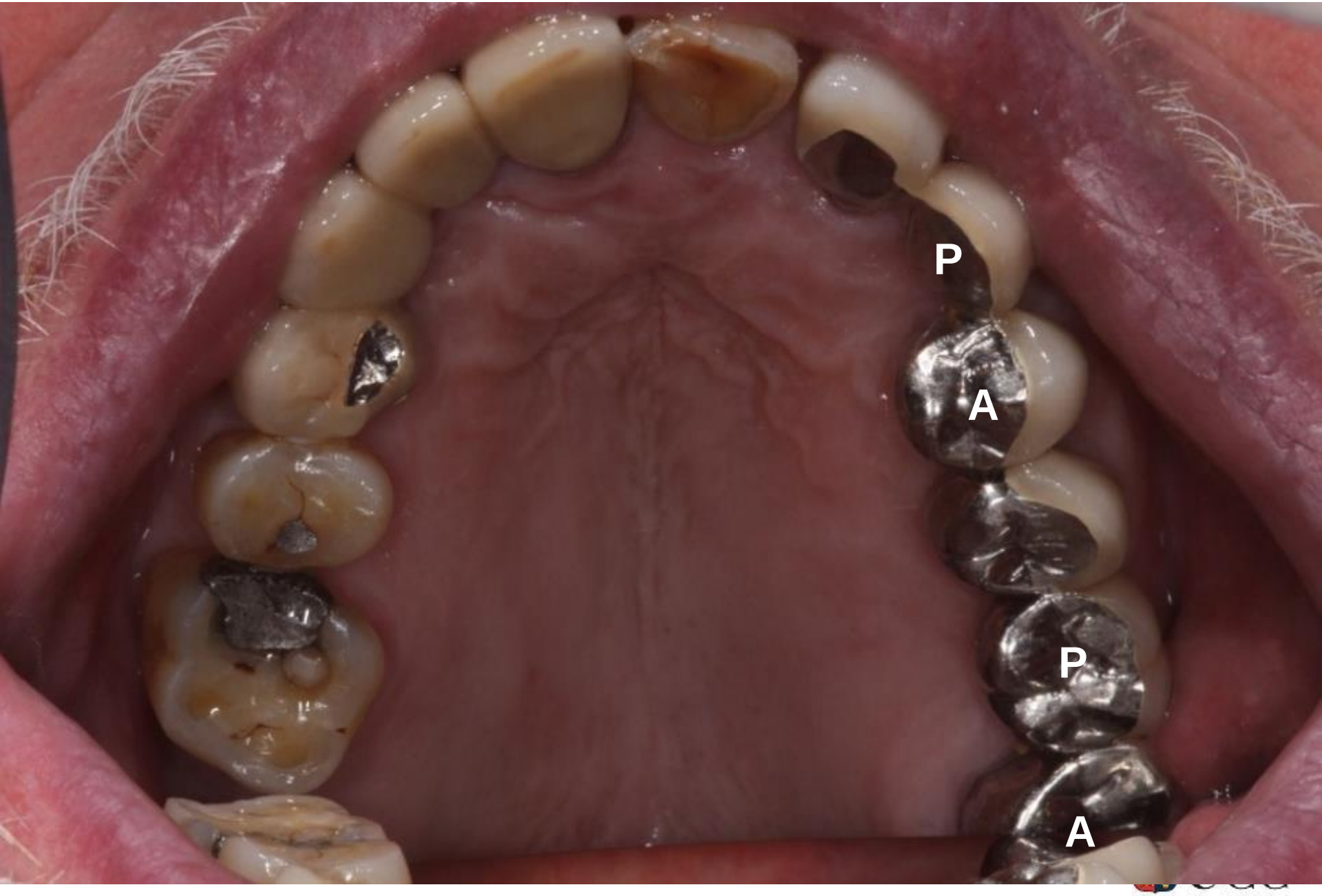
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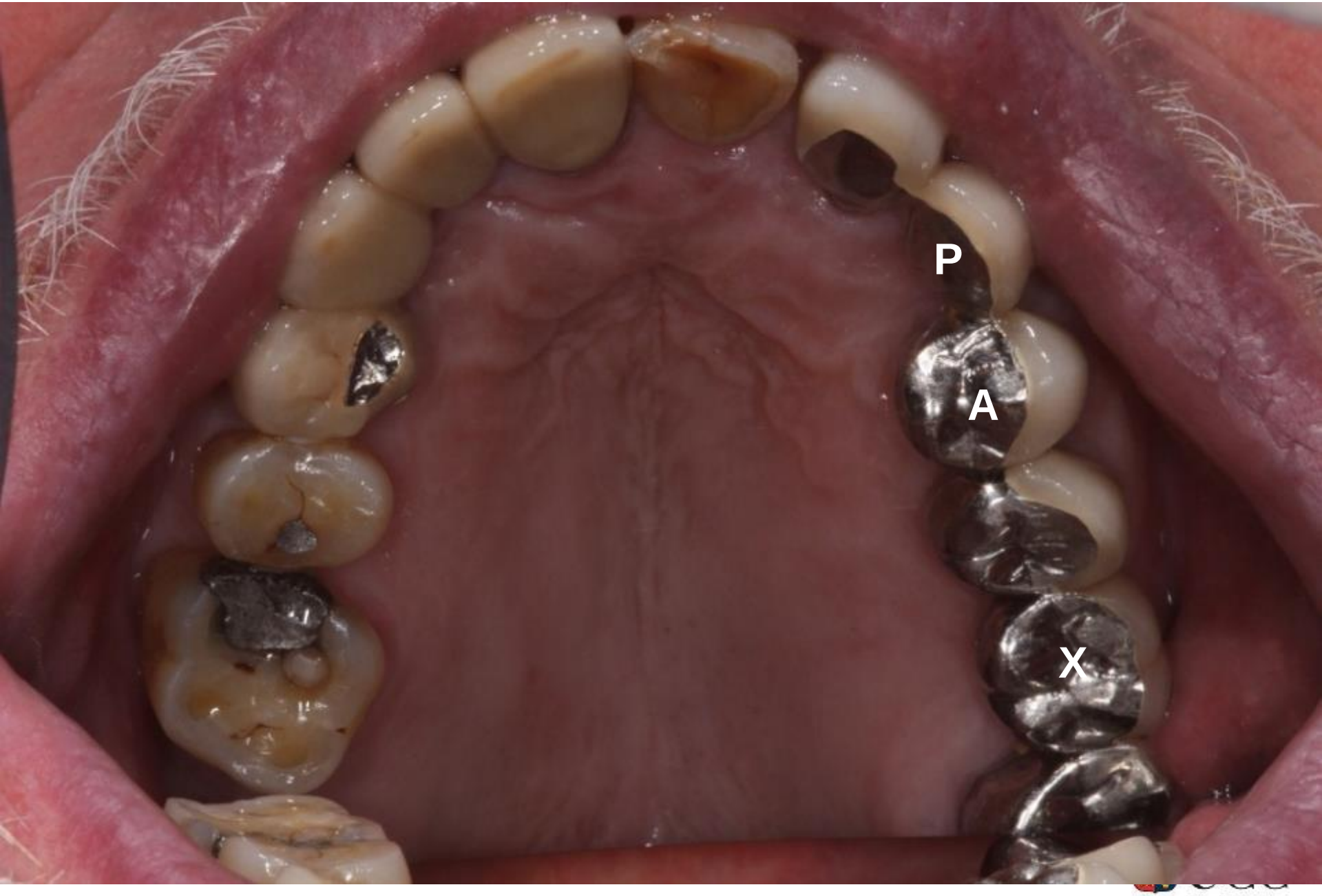
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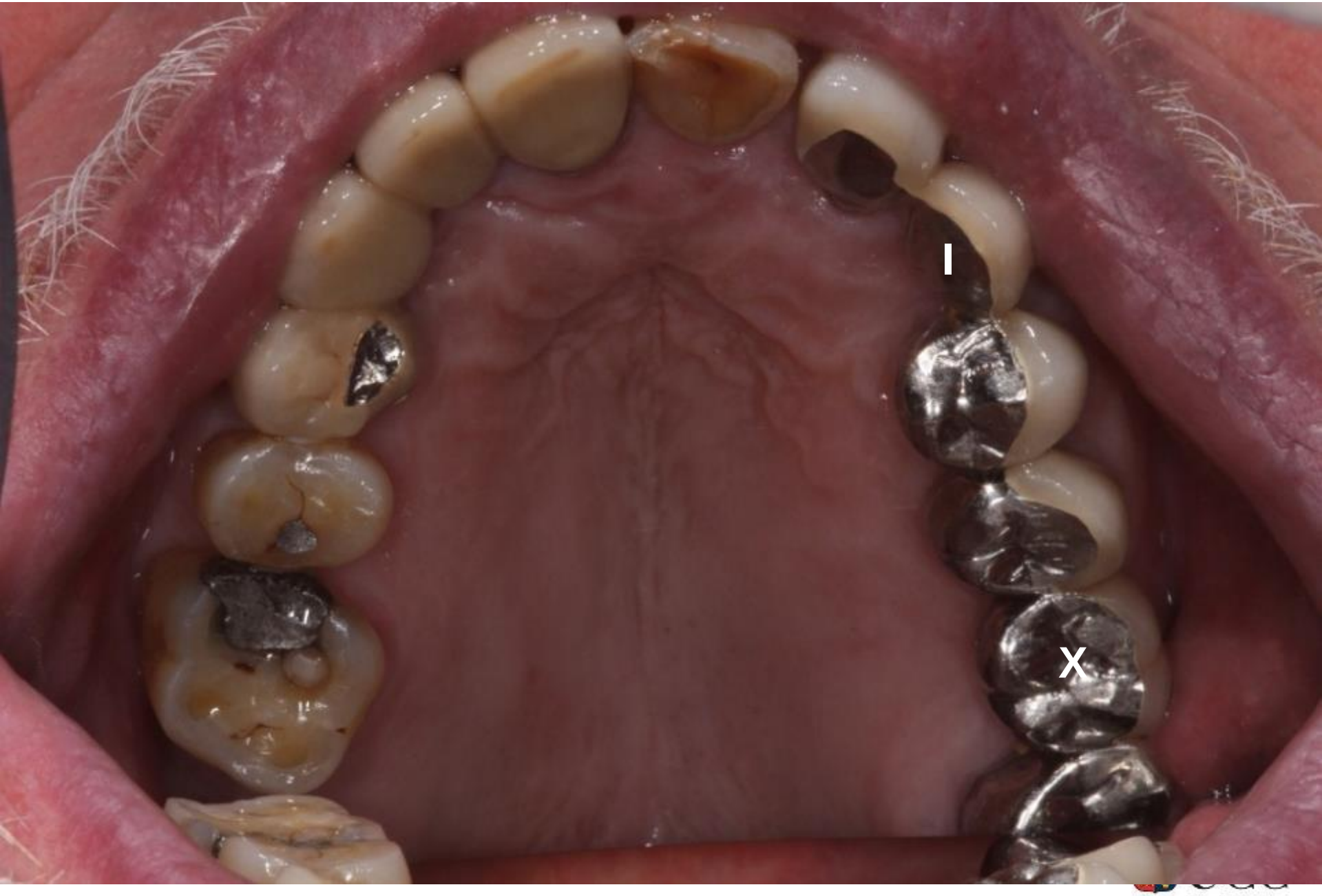
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Basis for Manpower Planning

Population

Population distribution

Oral health

Oral care skillset

Personnel

Cost of training

Cost of care

Evidence base

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Dentist	€185 000
Postgraduate	€400 000
Hygienist	€34 000

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Dental therapists' expanded scope of practice in Australia:

a 12-month follow-up of an educational bridging program to facilitate the provision of oral health care to patients 26+ years

Hopcraft M, Martin-Kerry J, Calache H

Journal of Public Health Dentistry

2015; **75:**234-244

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Management of Older Adults

Attrition, erosion and abrasion

Pulpal recession

Root caries

Xerostomia

Oral changes resulting from oral disease/medication

Management approaches for older adults

Three hours

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Clinical Practice

Oral Diagnosis

Examination

Intraoral radiography

Impression taking

Prevention

Fissure sealants

S & P

Therapeutic solution application

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Clinical Practice- Operative Care

LA

Coronal restorations

Pulpotomy

Root caries

Carious lesions on abutment teeth

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Cost-effectiveness of ART restorations in elderly adults: a randomized clinical trial

da Mata C*, Allen PF, Cronin M, O'Mahony D, McKenna G and Woods N

Community Dentistry and Oral Epidemiology
2014; **42:**79-87

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RCT

- Comparison of Conventional Treatment v ART
- Cost
- Restoration survival 1 year

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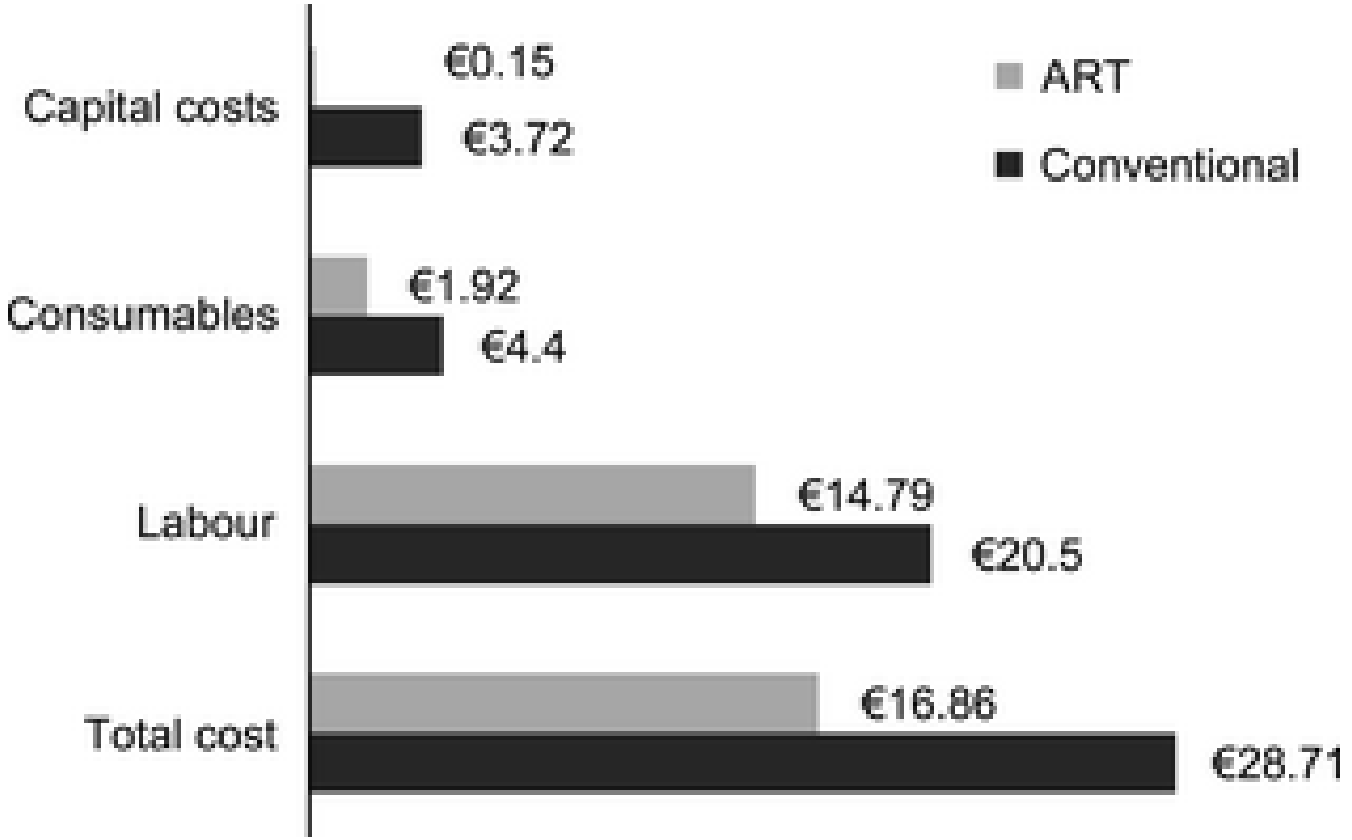

Community Dentistry and Oral Epidemiology
Volume 42, Issue 1, pages 79-87, 19 AUG 2013 DOI: 10.1111/cdoe.12066
http://onlinelibrary.wiley.com/doi/10.1111/cdoe.12066/full#cdoe12066-fig-0003

	Restoration Cost (€)	Cost Effectiveness
Conventional	28.71	0.29
ART	16.86	0.18
ART (Hygienist)	12.76	0.14

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Conculsions

Provide an overview of the dental challenges of managing the ageing population

Dentistry will be more…….

Varied

Challenging

Interesting

Conclusions

Provide an overview of the economic challenges of managing the ageing population

There will be an increasing demand with less money

Raise the pension age

Old people vote!

Conclusions

Discuss educational challenges for dental schools in preparing the next generation of dental professionals

Integrate Gerodontology into curricula

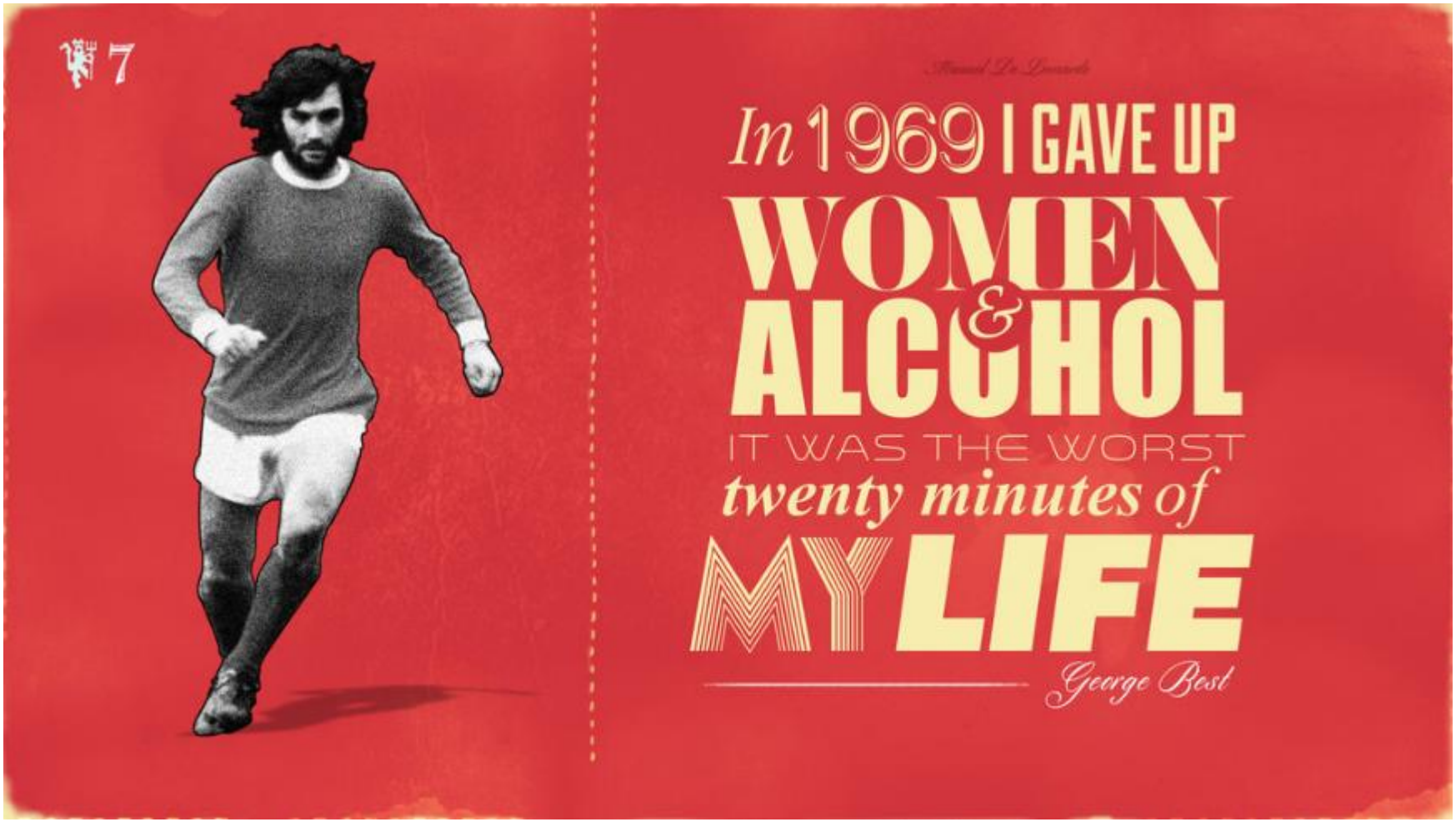
Emphasise an evidence based approach

Pragmatism over idealism

Conclusions

Discuss the manpower challenges in managing the ageing population

Explore the use of dental auxiliaries



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