

Impact of National Guidance for Drug Prescribing for Dentistry

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methodology group

Scottish Dental Clinical Effectiveness Programme
NHS Education for Scotland

Impact of National Guidance for Drug Prescribing for Dentistry

- SDCEP and TRiADS
- Guidance on Drug Prescribing For Dentistry
- Analysis of routine data
- Implementation strategy

I certify that, to the best of my knowledge, no aspect of my current personal or professional situation might reasonably be expected to affect significantly my views on the subject on which I am presenting.

Scottish Dental Clinical Effectiveness Programme (SDCEP)

‘supporting the dental team to provide quality patient care’

- Provide user-friendly, evidence-based guidance
- Priority topics for oral health
- Published guidance distributed to all dental practitioners in Scotland
- Relevant to other healthcare disciplines
- Used within Scotland and beyond
- Underpins education and informs policy

SDCEP Scottish Dental Clinical Effectiveness Programme

NHS SCOTLAND

SDCEP

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Scottish Dental Clinical Effectiveness Programme

The Scottish Dental Clinical Effectiveness Programme (SDCEP) is an initiative of the National Dental Advisory Committee (NDAC) in partnership with NHS Education for Scotland (NES).

Published Guidance

- Conscious Sedation
- Decontamination - Cleaning of Dental Instruments
- Decontamination - Sterilization of Dental Instruments
- Dental Care in Children
- Drug Prescribing (Second Edition)
- Emergency Dental Care
- Oral Health Assessment and Review
- Oral Health Management of Patients Prescribed Bisphosphonates
- Practice Support Manual (first 6 topics)

Consultations

- None at present

In Development

- Practice Support Manual
- Management of Acute Dental Problems
- Other proposed guidance topics

About SDCEP

- Who we are
- What we do
- How we work
- Contact Information

Scottish Dental News Service

- Clinical trials information evening
- Local Decontamination Unit (LDU) Support Service
- SDCEP - Sterilization of Instruments

Feedback

Created by Innovation

TRiADS – Translational Research in a Dental Setting

- A programme of knowledge translation research embedded within SDCEP guidance development.
- Uses a standardised process to inform
 - development of guidance
 - need for, and design of, KT strategies;
 - evaluation of KT strategies.
- A multi-disciplinary research collaboration with public, academic, policy, service and professional members.
- Aims to improve knowledge translation into practice.

Clarkson *et al.* *Implementation Science* 2010, 5:57
<http://www.implementationscience.com/content/5/1/57>



IMPLEMENTATION SCIENCE

STUDY PROTOCOL

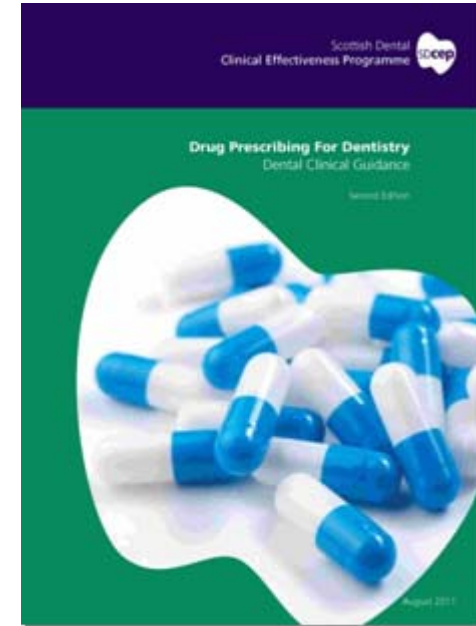
Open Access

The translation research in a dental setting (TRiADS) programme protocol

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Drug Prescribing For Dentistry Guidance

- One of nine SDCEP guidance publications
- Improve access to dentally-relevant information on prescribing
- National quality improvement initiative on antimicrobial prescribing
- Concern about co-prescribing of warfarin and statins and associated drug interaction issues



Drug Prescribing For Dentistry Guidance

- Local measures highlighted
- Antibiotics only recommended for spreading, systemic infection
- References NICE recommendation on antibiotic prophylaxis
- First edition published in April 2008
- Printed updates provided in line with changes to relevant prescribing advice in BNF or BNFC
- Second edition published August 2011
- Has proved very popular



- A5 spiral bound booklet
- Problem-oriented style with drug regimens presented as 'prescriptions'
- Footnote highlights notable drug interactions and other relevant information
- To be used in association with BNF and BNFC for further interaction details

4 Bacterial Infections

4.3 Acute Necrotising Ulcerative Gingivitis and Pericoronitis

As an adjunct to local measures (see below), metronidazole is the drug of first choice in the treatment of acute necrotising ulcerative gingivitis and the treatment of pericoronitis where there is systemic involvement or persistent swelling despite local measures. A suitable alternative is amoxicillin.

Local Measures – to be used in the first instance

- In the case of acute necrotising ulcerative gingivitis, carry out scaling and provide oral hygiene advice.
- In the case of pericoronitis, carry out irrigation and debridement.

If drug treatment is required, an appropriate 3-day regimen is:

Metronidazole Tablets, 200 mg

Send: 9 tablets

Label: 1 tablet three times daily

For children:

Metronidazole[†] Tablets, 200 mg, or Oral Suspension, 200 mg/5 ml

1-3 years	50 mg three times daily
3-7 years	100 mg twice daily
7-10 years	100 mg three times daily
10-18 years	200 mg three times daily

NB: Advise patient to avoid alcohol (metronidazole has a disulfiram-like reaction with alcohol).

The anticoagulant effect of warfarin might be enhanced by metronidazole.

[†]Metronidazole is not licensed for use in children under 1 year (see Section 1.2).

or

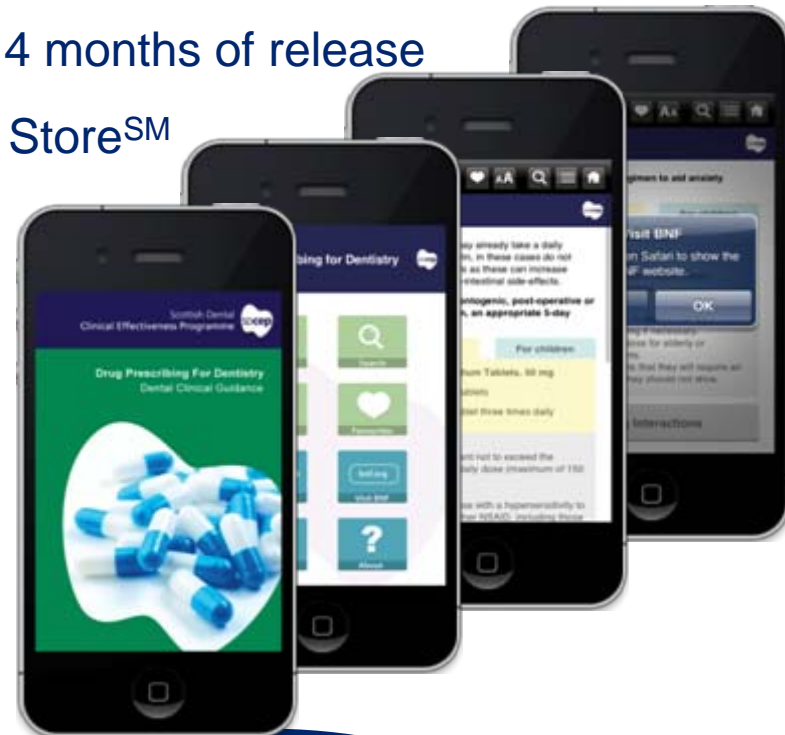
Dental Prescribing app

- Direct links to BNF website for drug interaction information
- Updated when new BNF released; updates are free
- >1100 downloads across the globe in first 4 months of release
- Very positive feedback from users on App StoreSM
- Embedded analytics programme which allows analysis of app usage



“No dentist should be without this”

An English Dean

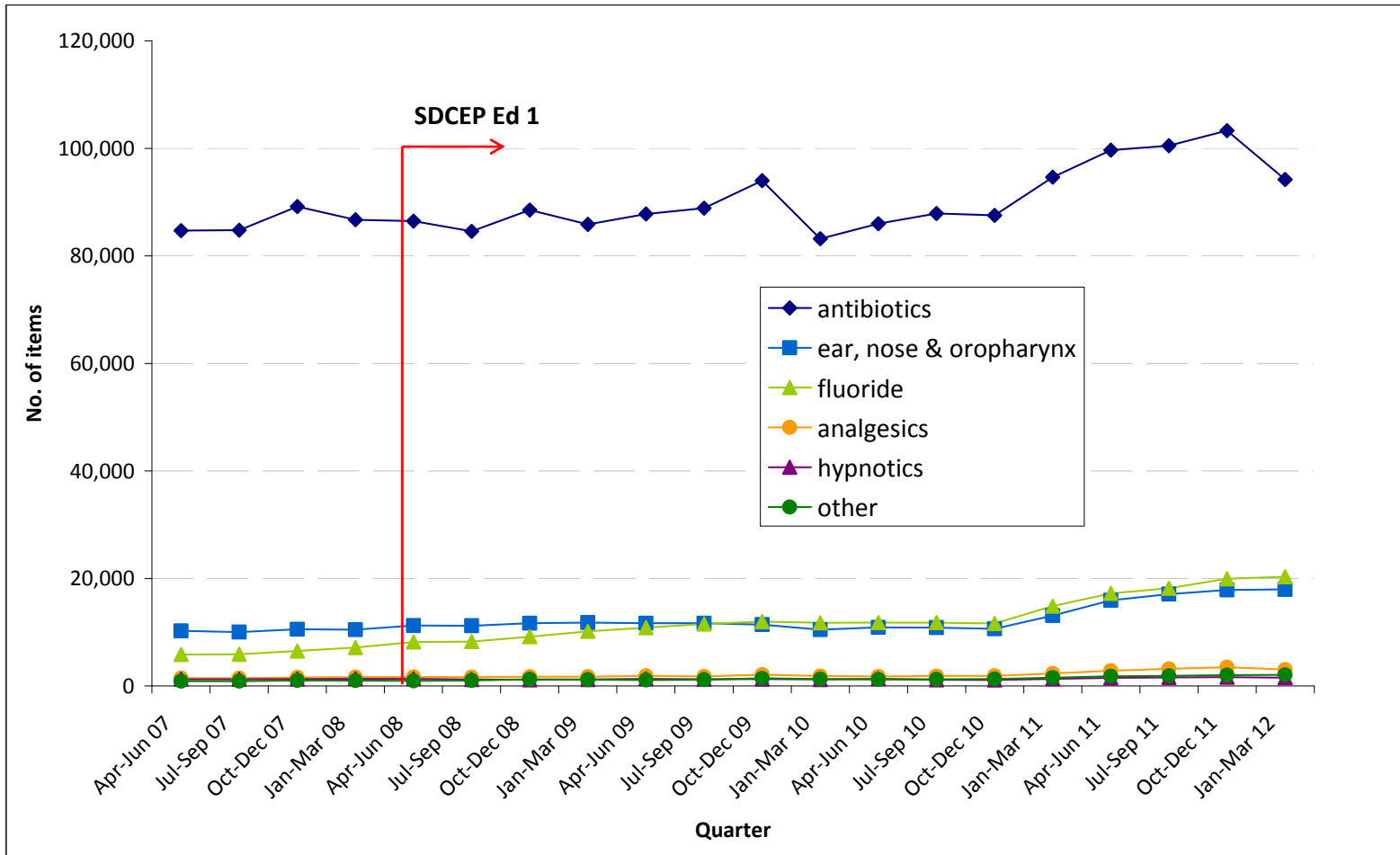


Monitoring of Prescribing

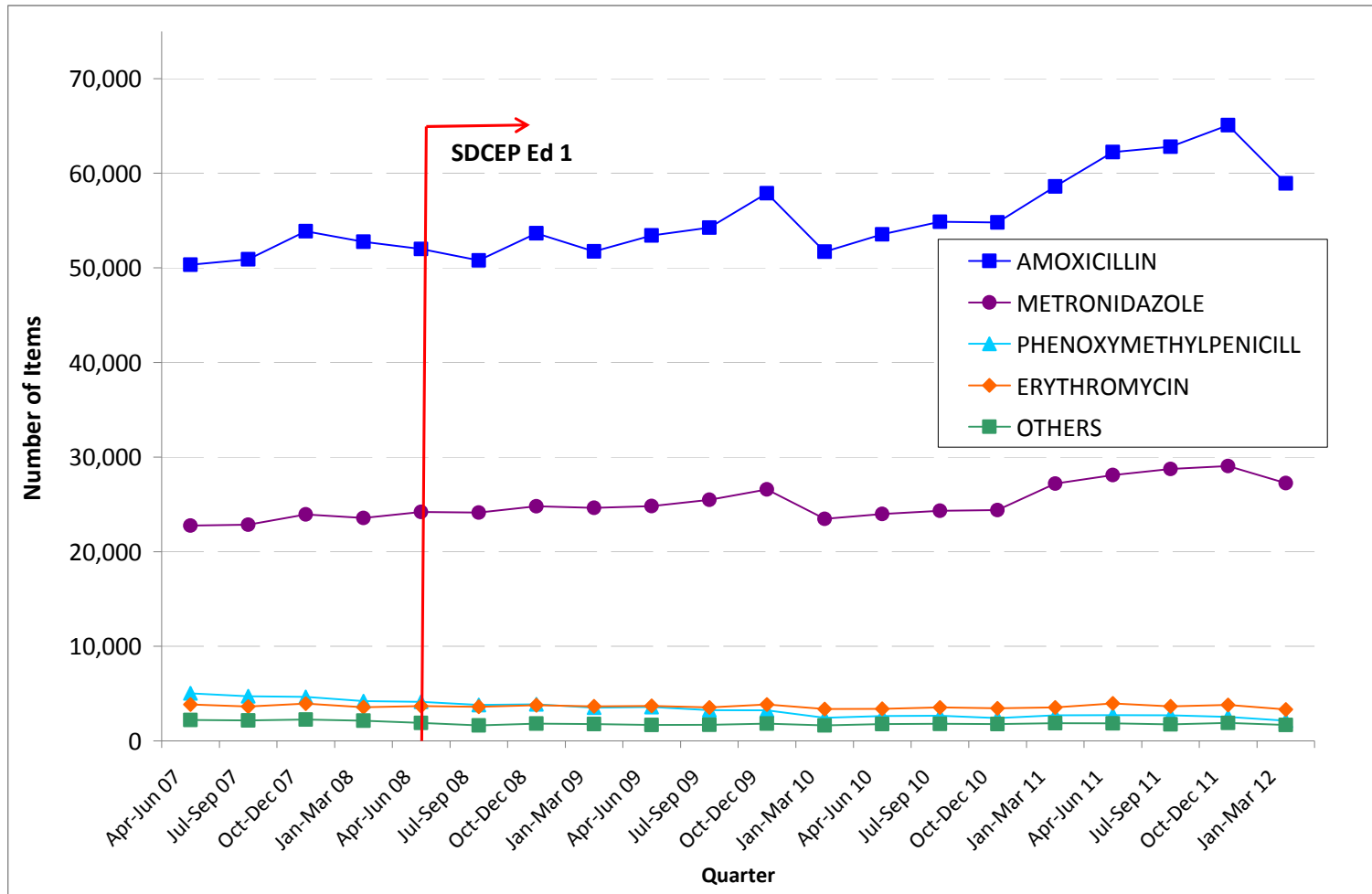
- SDCEP has access to prescribing data for all individual dentists in Scotland
- Routine prescribing data was monitored pre- and post-publication, analysed and trends identified
- Around 8% of antibiotic prescriptions in Scotland originate from dentists



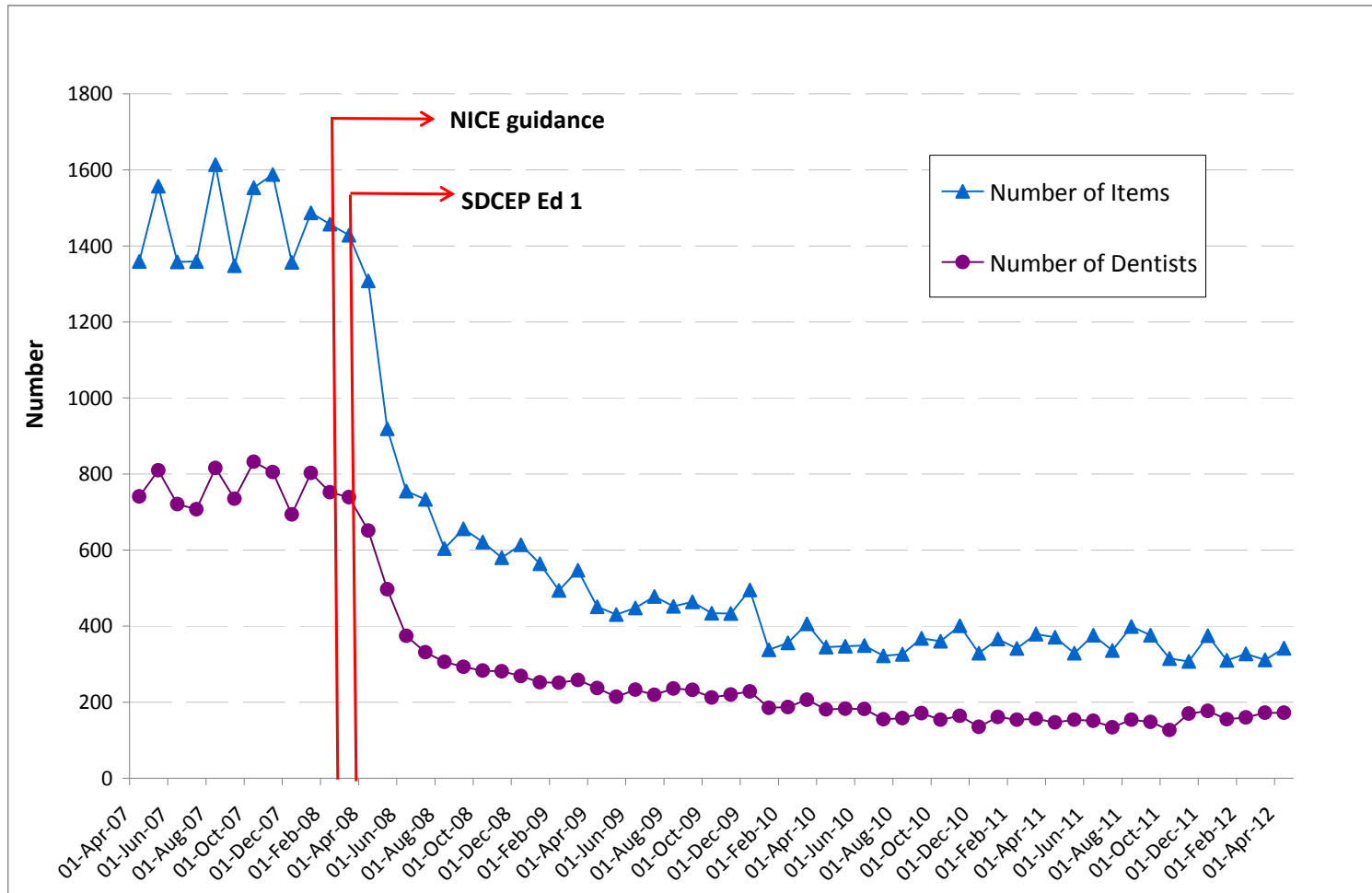
Total prescribing by dentists



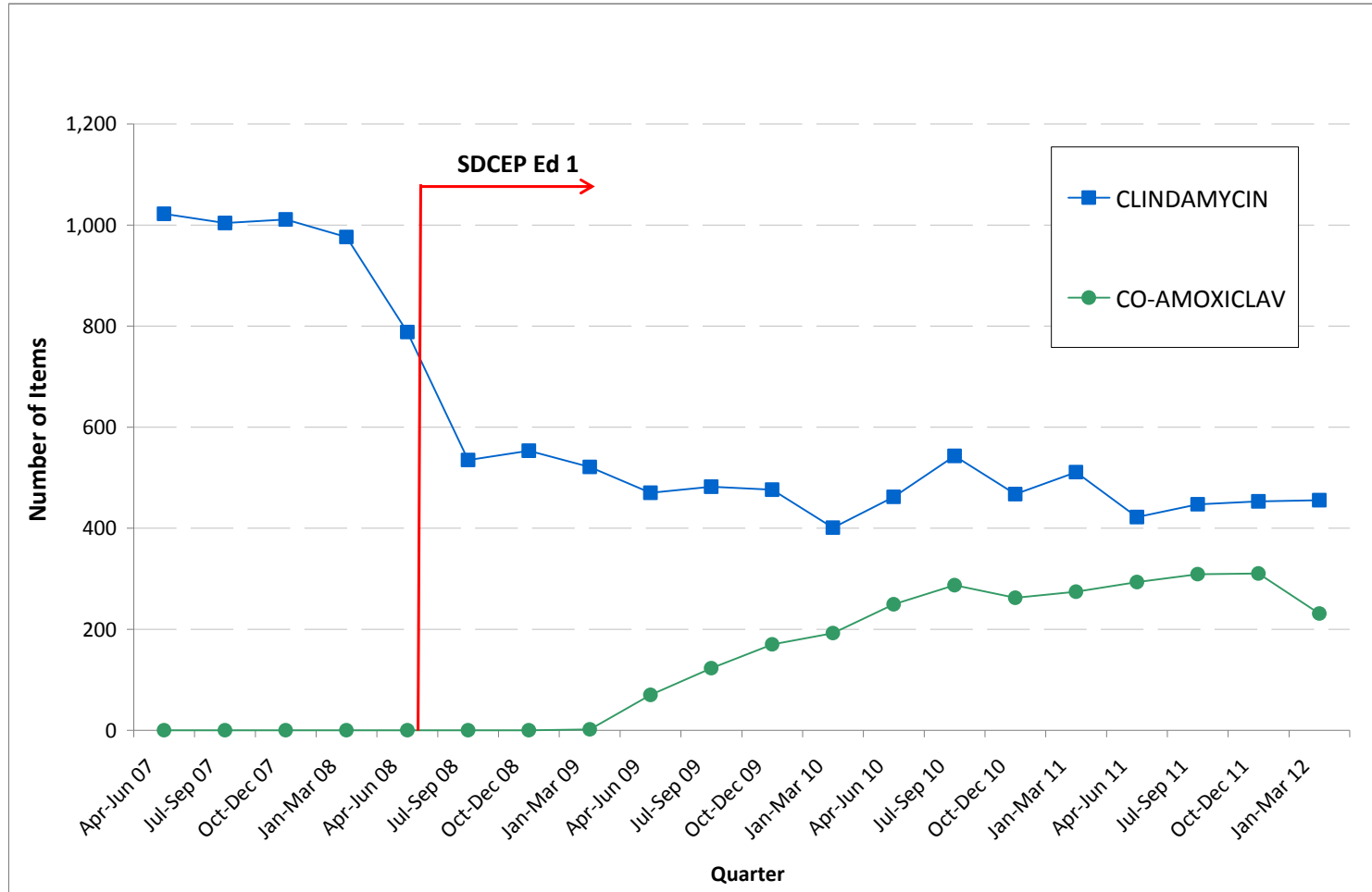
Dental antibiotic prescribing by drug



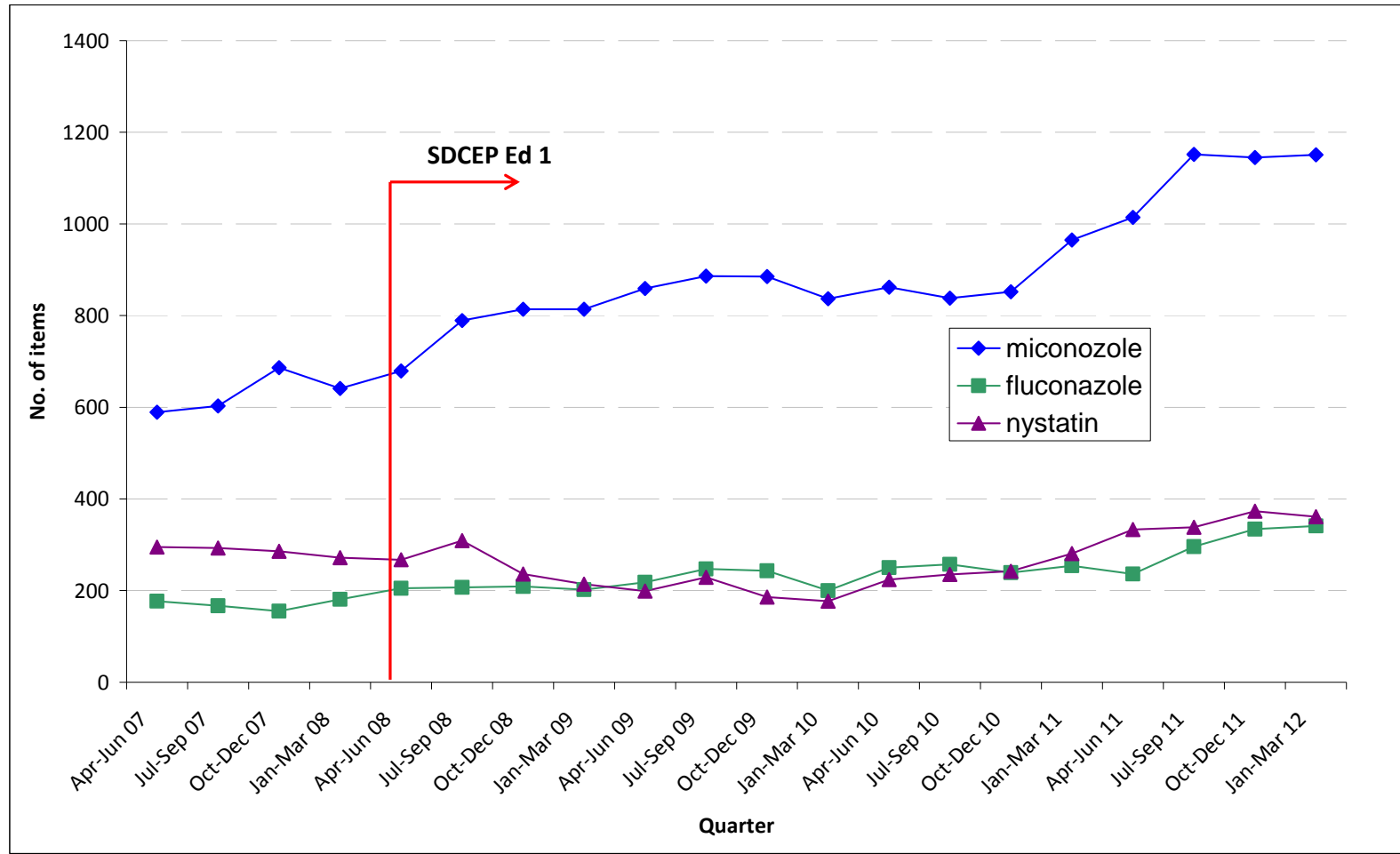
70% reduction in prescribing of amoxicillin 3g following publication of national guidance



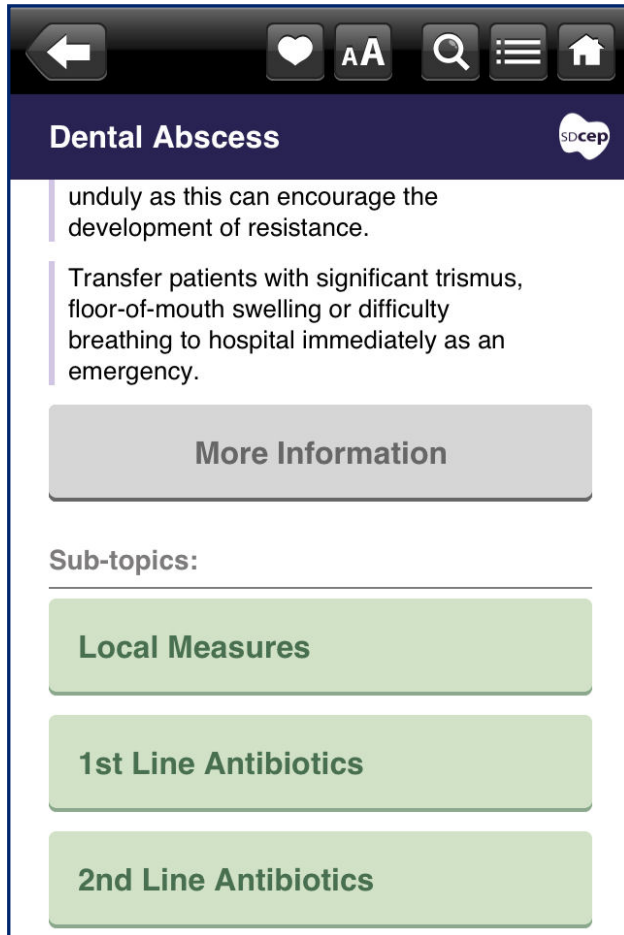
Changes in the prescribing of clindamycin and co-amoxiclav



Anti-fungal drugs



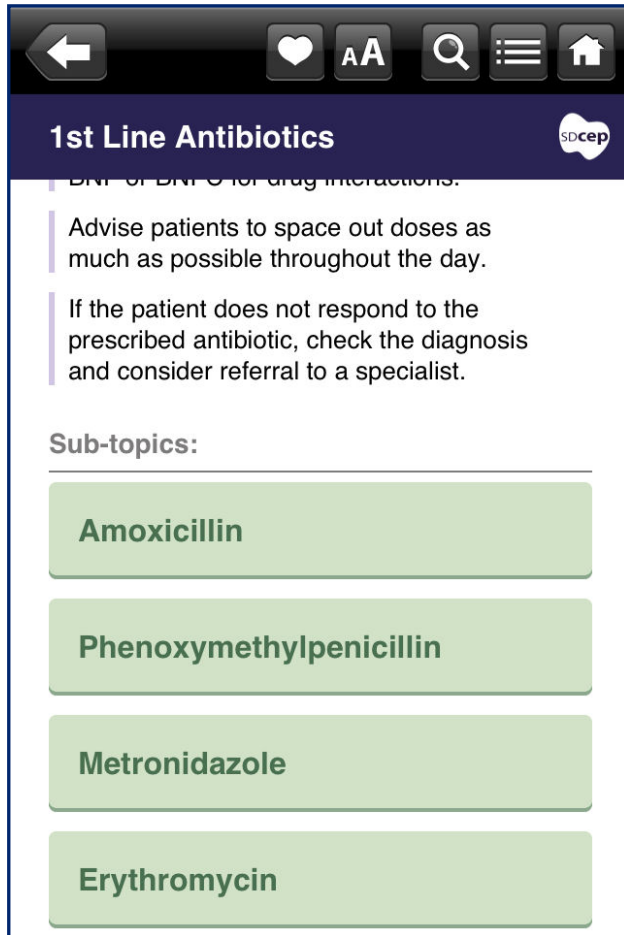
Data From Analytics Programme



From this screen, users chose:

Local Measures	25%
1 st Line Antibiotics	54%
2 nd Line Antibiotics	4%
Other (end session, ANUG, etc.)	17%

Data From Analytics Programme



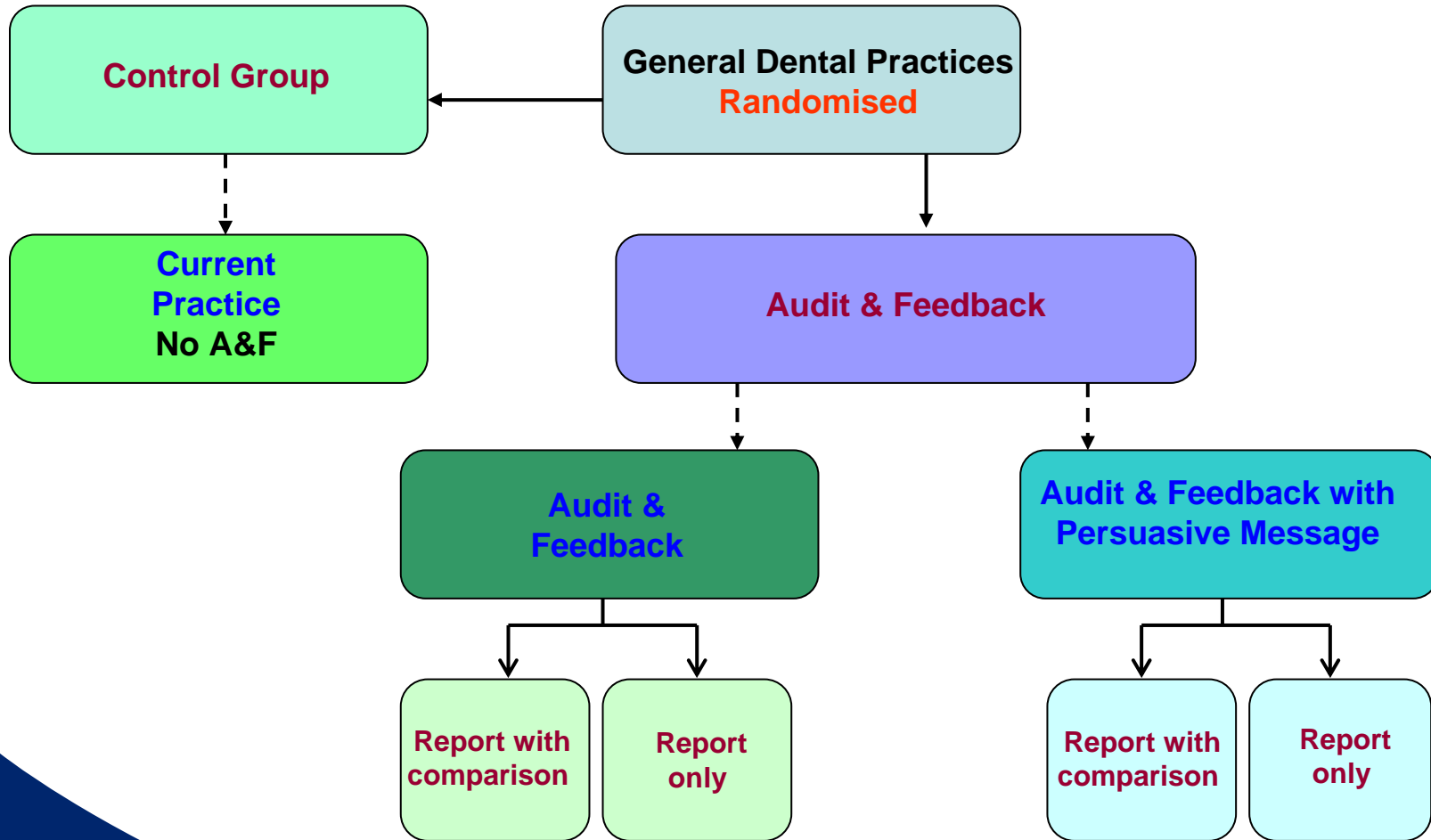
From this screen, users chose:

Amoxicillin	50%
Phenoxymethylpenicillin	7%
Metronidazole	12%
Erythromycin	8%
Other (end session, ANUG)	23%

Monitoring of Prescribing

- Total antibiotic prescribing by dentists has not decreased, except in case of amoxicillin 3g
- An additional KT intervention is required
- In the Cochrane Review *Audit and Feedback: Effects on Professional Practice and Healthcare Outcomes* A&F is said to be effective when
 - baseline performance is low
 - verbal and written delivery by a supervisor or senior colleague
 - provided more than once
 - aims to decrease current behaviours
 - targets prescribing
 - includes targets and an action plan

RAPiD – Reducing Antibiotic Prescribing in Dentistry



In Conclusion

- Guidance for drug prescribing in dentistry was published in 2008
- Routine monitoring of prescribing shows there has not been a reduction in dental antibiotic prescribing
- A further KT intervention (RAPiD) will be implemented which will
 - encourage appropriate prescribing by audit and feedback
 - assess A&F as a method to change professional behaviour
- Monitoring of routine data can be an invaluable tool to support guidance implementation

Thanks

- SDCEP Programme Development Team
- TRiADS Methodology Group
- *Drug Prescribing for Dentistry* Guidance Development Group
- NHS Education for Scotland
- University of Dundee Dental Hospital and School
- Waracle

www.sdcep.org.uk