



9th National CPD Accreditation Conference

SEPTEMBER 25 & 26, 2017

OTTAWA MARRIOTT HOTEL
100 KENT ST, OTTAWA, ON



CANADA 150



ROYAL COLLEGE
OF PHYSICIANS AND SURGEONS OF CANADA
COLLÈGE ROYAL
DES MÉDECINS ET CHIRURGIENS DU CANADA

THE COLLEGE OF
FAMILY PHYSICIANS
OF CANADA



LE COLLÈGE DES
MÉDECINS DE FAMILLE
DU CANADA

University of Toronto CPD

Test-Enhanced Learning for CPD

RECIPIENT OF THE ROYAL COLLEGE ACCREDITED CPD PROVIDER INNOVATION AWARD

Suzan Schneeweiss MD, MEd, FRCPC
Associate Dean, CPD, Faculty of Medicine

Faculty/Presenter Disclosure

- **Faculty:** [Suzan Schneeweiss]
- **Relationships with commercial interests:**
 - None

Disclosure of Commercial Support

- Annual Paediatric Update Conference received unrestricted educational grants from multiple commercial sponsors
- Commercial sponsors were not involved in scientific planning committee for the conference or TEL program or development

Acknowledgements

Mark Feldman MD, FRCPD
CPD Director Department of Paediatrics
Chair, SickKids Annual Paediatric Update Conference

Mahan Kulasegaram PhD
Scientist, the Wilson Centre; Evaluation Scientist, University of Toronto MD Program; Cross-Appointed Scientist, Centre for Ambulatory Care Education, Women's College Hospital.

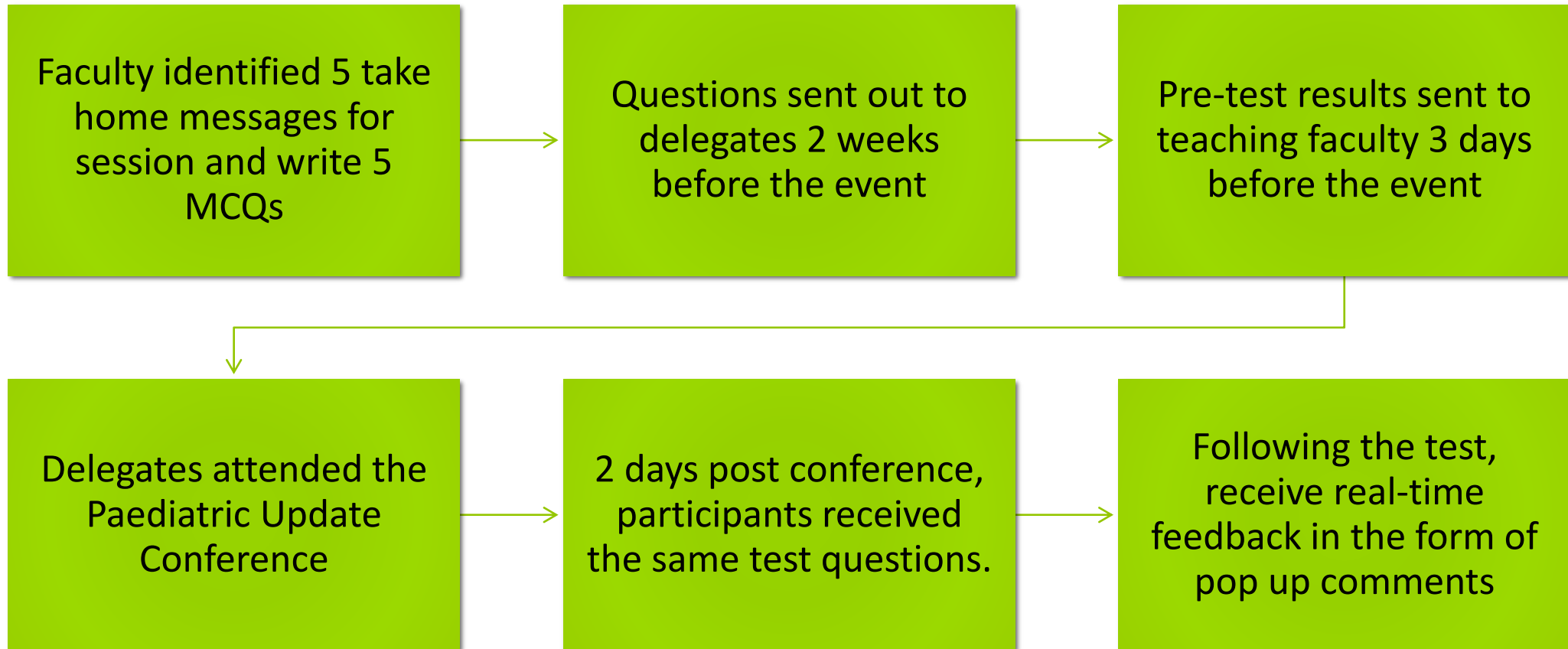
Michelle Wan
CPD Administrator

Test Enhanced Learning in CPD

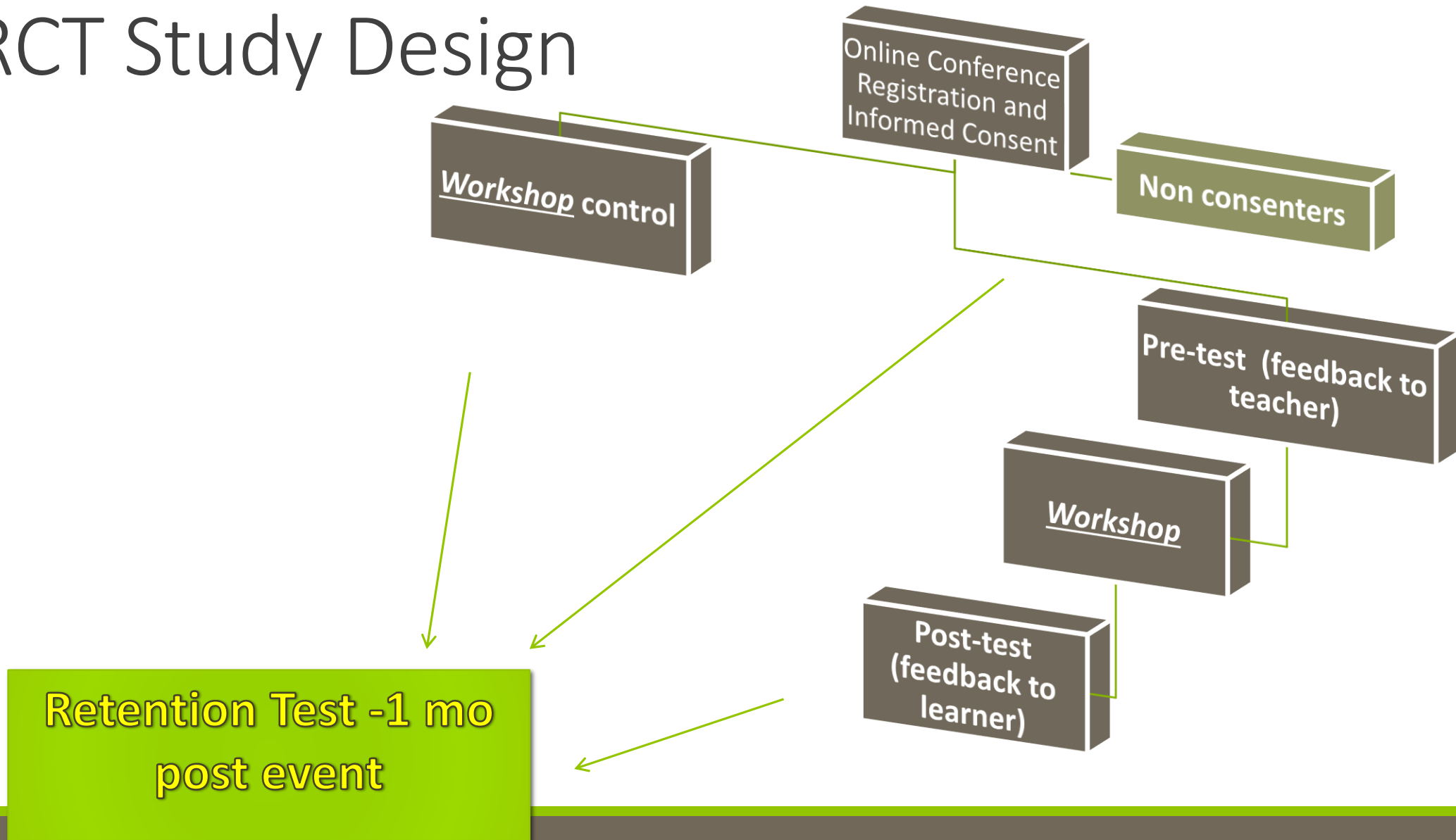
Description of the innovation

- Flexible and portable, test-enhanced learning package offered in conjunction with a large group learning activity.
 - Annual Paediatric Update Conference > 300 delegates over 4 days
 - Concurrent learning - 12 to 80 learners/session
 - Pre- and post-conference MCQ's with feedback on-line → Piloted in 2015
 - Implemented in 2016 (RCT)
- Allows delegates to earn either RCPSC MOC section 1 OR MOC section 3 credits for the sessions they attend depending on the level their participation

Test Enhanced Learning for CPD



RCT Study Design



Methods - Outcome Measures

Retention test at 1 month *1⁰ Outcome

- 3rd set of MCQ's for TEL group (**different MCQ's**)
- 1st set of MCQ's for control group

- 2⁰ outcomes include:
 - reported changes in learning behaviour
 - reported changes in teaching behaviour
 - satisfaction
 - efficiency of TEL

Results - Subjects

- 300 registrants, 186 consented
- 16 concurrent workshops at conference
- 15 workshop leads provided MCQ's
- 15 studies analyzed in meta analysis
- 126 participants completed data for analysis
- 445 data points

Test Enhanced Learning

Evaluation

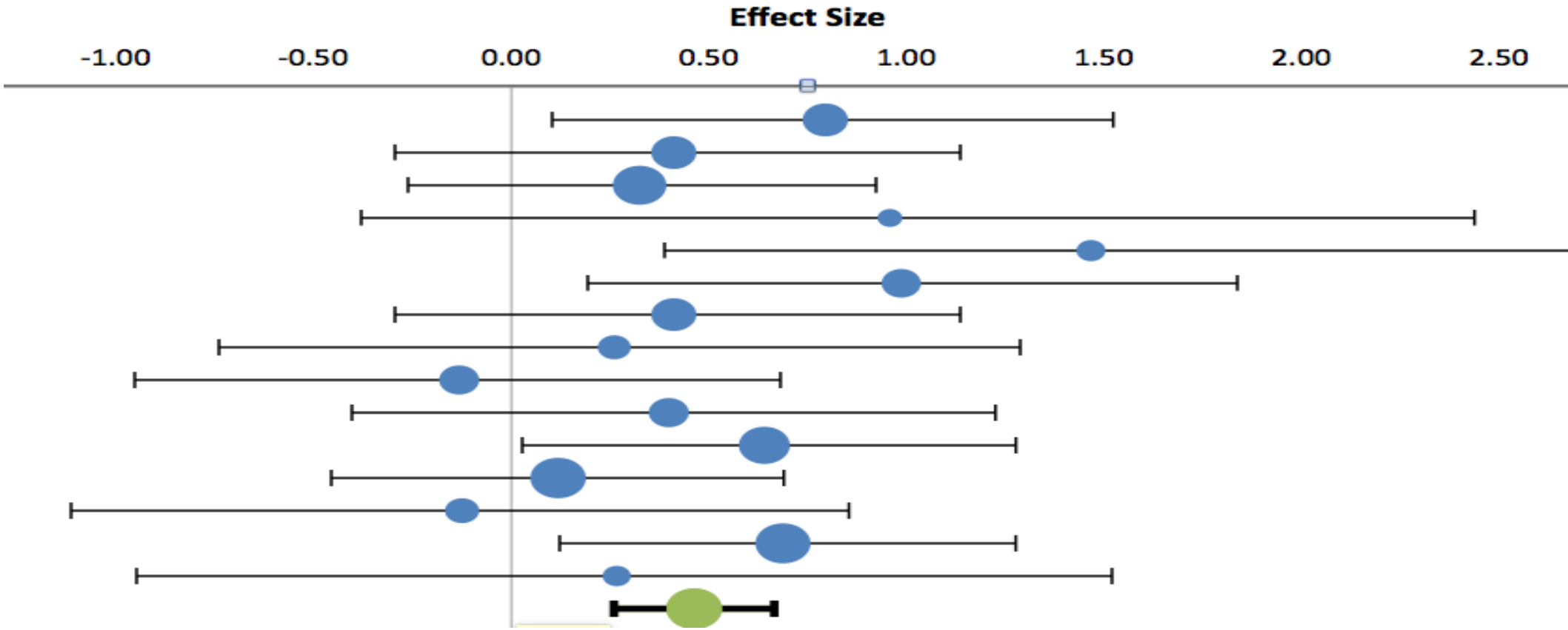
... Across workshops, majority of participants (>80%) agreed or strongly agreed:

Pre-tests enhanced their learning in workshops

Pre-tests helped identify their knowledge gaps

Post-tests helped check their learning

Results – Effect of the TEL package



Test-Enhanced Learning for CPD

Contributing to
or enhancing
lifelong
learning

- *Test potentiated learning (pre-test) identifies needs for learners and teachers*
- *Reflection and preparation enhances learning experience at conferences*
- *Post-test with MCQ is efficient and enhances durability of knowledge gained in workshop*
- *Creates opportunities for assessment and feedback as part of MOC program for the Royal College*

Test Enhanced Learning for CPD

HOW CAN THIS INNOVATION BE ADAPTED?

- *Easily transferrable online multiple-choice question format*
- *Online format easy to adapt according to individual course needs*
- *Flexibility – add on to an existing CPD event, can choose number of sessions to offer*
- *Learner –earning credits at MOC section 1 or 3 efficient, flexible and customizable*

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Dissemination...

Year	Number of conference registrants	# of test-enhanced learning sessions	Total MOC 3 sessions completions by registrants	Session length (hours)	Total MOC 3 credit hours earned by conference participants
2014	275	5	234	1.5	351
2015	309	12	393	1.5	589.50
2016	300	14	438	*Varied at 1, 1.25 and 1.5	563

Test-Enhanced Learning

Questions?

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Thank you!
9th National CPD
Accreditation
Conference

September 25 & 26, 2017
Ottawa Marriott Hotel
100 Kent St, Ottawa, ON



Methods - Analysis

Concurrent workshops

Each participant randomized separately for ***Each workshop***

Each workshop an individual 'study'

Mean scores compared for each 'study'

'Studies' weighted by number of participants

Analyzed as a random-effects ***meta analysis*** of linear outcomes (Hedge's g)