



ISPOR MEDICATION ADHERENCE AND PERSISTENCE SPECIAL INTEREST GROUP

METHODS FOR MEASURING MULTIPLE ADHERENCE, RESULTS AND FUTURE WORKS

Monday, 4 November 2019 7:00 to 8:15

Speakers

Theresa Tesoro, MSN, Associate Director, Scientific and Health Policy Initiatives, ISPOR

Mia Malmenäs, Msc, MBA, EMBA ICON plc, Stockholm, Sweden

Tamás Ágh, MD, MSc, PhD, Syreon Research Institute, Budapest, Hungary

Agenda

Item #	Time	Topic	Presenter(s)
1	7:00	Welcome and Review of Agenda	Mia Malmenäs
2	7:05	Antitrust	Mia Malmenäs
3	7:05	Overview of Special Interest Group Structure	Theresa Tesoro
4	7:15	Medication Adherence and Persistence - Past projects - Potential key projects - Member engagement projects - Book of terms	Mia Malmenäs Tamás Ágh
5	7:50	Next Steps and Questions	Mia Malmenäs
6	8:00	Sign up	All
7	8:10	Adjournment	Mia Malmenäs

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Antitrust Compliance Statement

- ISPOR has a policy of strict compliance with both United States, and other applicable international antitrust laws and regulations.
- Antitrust laws prohibit competitors from engaging in actions that could result in an unreasonable restraint of trade.
- ISPOR members must avoid discussing certain topics when they are together, including, proprietary or company-specific prices, fees, rates, profit margins, or other terms or conditions of sale.
- Members have an obligation to terminate any discussion, seek legal counsel's advice, or, if necessary, terminate any meeting if the discussion might be construed to raise antitrust risks.
- The Antitrust policy is available on the ISPOR website, under "About ISPOR."

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SECTION

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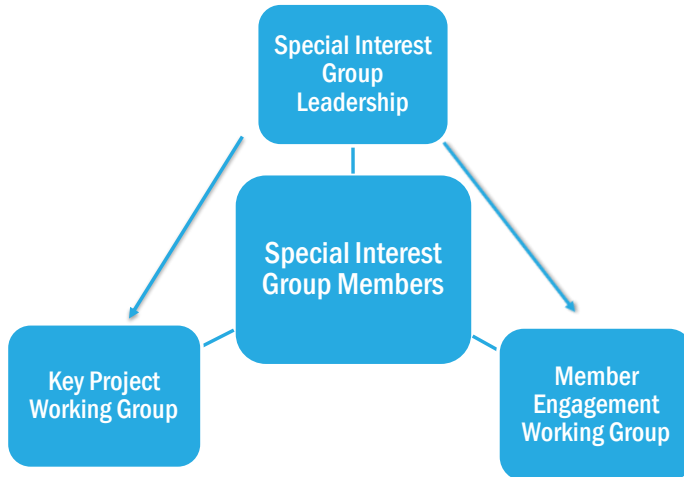
Overview of Special Interest Groups

Theresa Tesoro, MSN,
Associate Director, Scientific and Health Policy Initiatives

ISPOR Special Interest Groups

- Biosimilars
- Clinical Outcome Assessment
- Digital Health
- Health Preference Research
- Medical Devices and Diagnostics
- Medication Adherence and Persistence
- Nutrition Economics
- Oncology
- Open Source Models
- Patient-Centered
- Personalized/Precision Medicine
- Rare Disease
- Statistical Methods in HEOR
- Real World Evidence

Structure of Special Interest Group



- Special Interest Group Leadership
- Chair-elect
- Chair
- Past chair
- Each position is a 1-year term, resulting in a 3 year commitment

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Responsibilities of Chair-elect, Chair, Past Chair

- Provide overall direction and leadership
- Identify the topics SIG members would like to address
 - Categorizing topics into long, short term projects
 - Identify the appropriate platforms for delivery
- Work with the Working Group co-chairs to ensure the timeliness of the key project
 - Address any issues within the group
- Provide quarterly updates to the SIG membership
 - Current activities, new developments in field
- Report the progress of the SIG projects
 - Via the yearly business and project plan to HSPC
- Recruit new SIG members

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Working Groups within a SIG

Key Project Working Group:

- Manuscript in Value in Health or Value Outcomes & Spotlight

Member Engagement Working Group:

- Webinars
- Journal Club
- Presentation at ISPOR meetings or other organization meetings
- Encouraged communication



Each working group is led by a Co-Chair

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Working Group Co-Chairs Responsibilities

Key Project

- Serve until the project is complete (average 24 months)
- Lead the project
- Ensuring adherence to ISPOR processes and working group deadlines
- Address any conflicts or issues

Member Engagement Projects

- Serves for at least the year
- Work with SIG chairs to identify member engagement topics
- Identifying speakers, articles, topics for member engagement activities
- Ensuring that all member engagement activities occur



Those interested in leadership positions, please contact Kelly Lenahan at klenahan@ispor.org

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Medication Adherence and Persistence Special Interest Group

SPECIAL INTEREST GROUP OBJECTIVE



Conduct a systematic literature search of methods used calculating medication adherence for multiple drugs



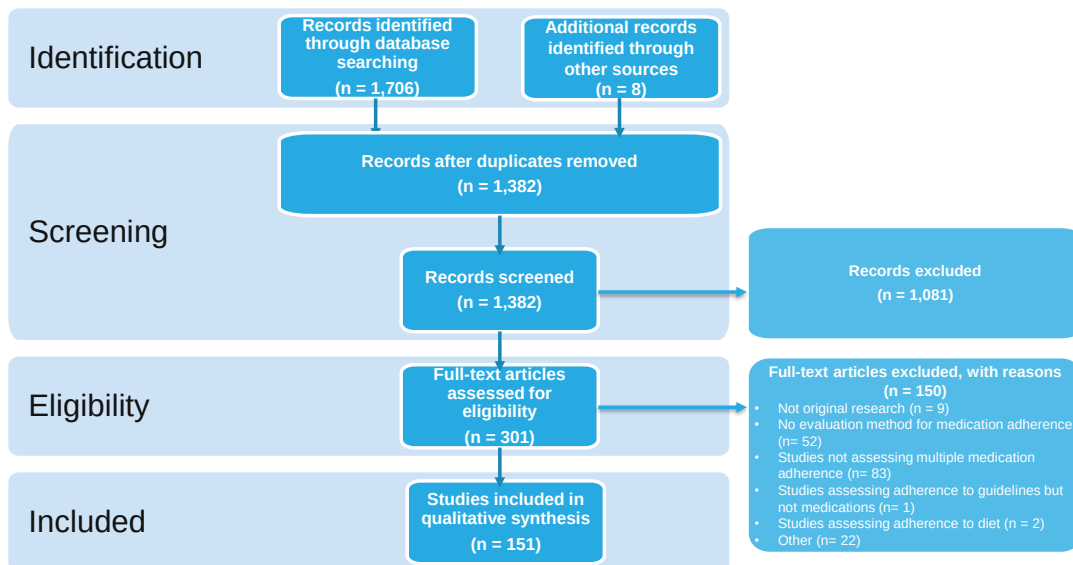
Summarize the results overall as well as by disease area



Investing the accuracy of the measurements by conducting simulation

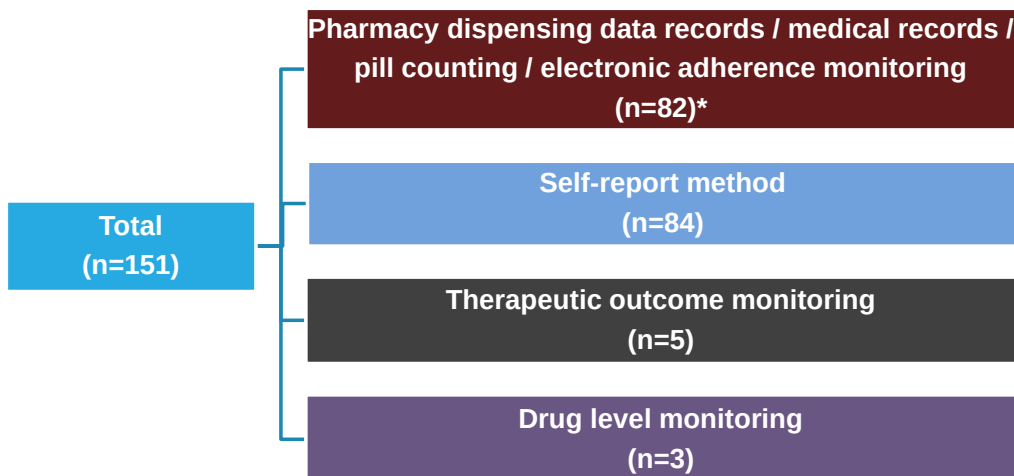


Summarize our findings (Publication)



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Methods for Measuring Multiple Medication Adherence: A Systematic Review-Report of the ISPOR Medication Adherence and Persistence Special Interest Group. Value Health. 2019. 22(2):139-156.



*: Adherence was measured in 75 studies, persistence was measured in 18 studies.
Please note that some articles included more than one method for measuring adherence to multiple medications.
MPR: Medication Possession Ratio, PDC: Proportion of Days Covered

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Methods for Measuring Multiple Medication Adherence: A Systematic Review-Report of the ISPOR Medication Adherence and Persistence Special Interest Group. Value Health. 2019. 22(2):139-156.

- **30 different self-report measures/methods were used in the studies**
- **Multi- / single-item questionnaire (n=84)**
 - The Morisky Medication Adherence Scale (MMAS) was the most commonly used PRO instrument (n=21)
 - MMAS 4-item (n=15)
 - MMAS 8-item (n=6)
 - MMAS 9-item (n=1)
- **Telephone / face-to-face interview (n=9)**
- **Informant rating - family member, nurse, doctor (n=5)**
- **Undefined - no further information given except self-report (n=3)**

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Please note that some articles included more than one self-report method for measuring adherence to multiple medications.

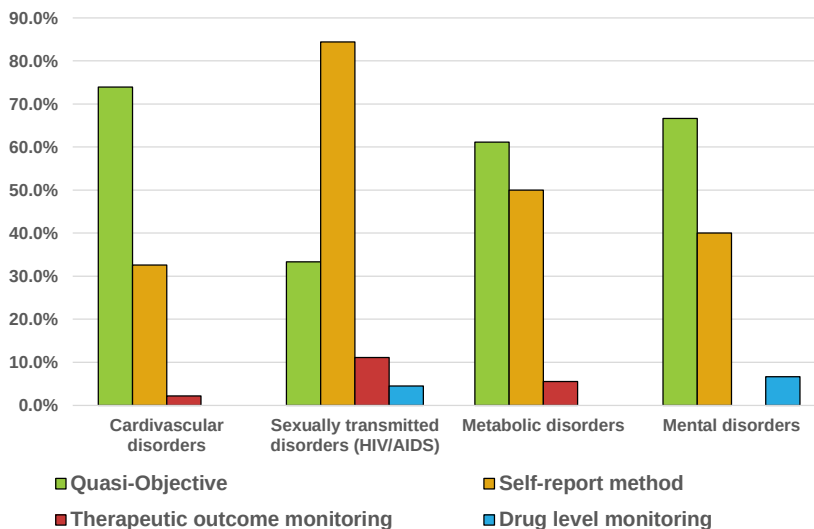
Methods for Measuring Multiple Medication Adherence: A Systematic Review-Report of the ISPOR Medication Adherence and Persistence Special Interest Group. Value Health. 2019. 22(2):139-156.

- **MPR for multiple medications (n=25)**
 - 10 different variations of MPR
 - Method of MPR was not reported/unclear in 8 studies
- **PDC for multiple medications (n=29)**
 - 9 different variations of PDC
 - Method of PDC was not reported/unclear in 2 studies
- **Medication gaps for multiple medications (n=6)**
 - 4 different methods
- **Other methods for multiple medications (n=20)**
 - 7 different methods
 - Method was not reported/unclear in 11 studies

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MPR: Medication Possession Ratio, PDC: Proportion of Days Covered

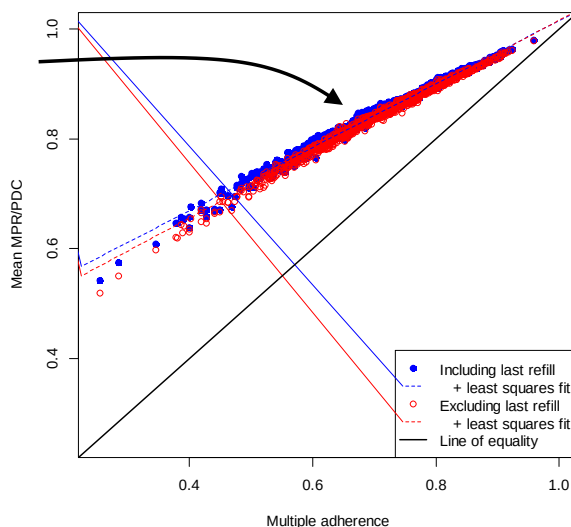
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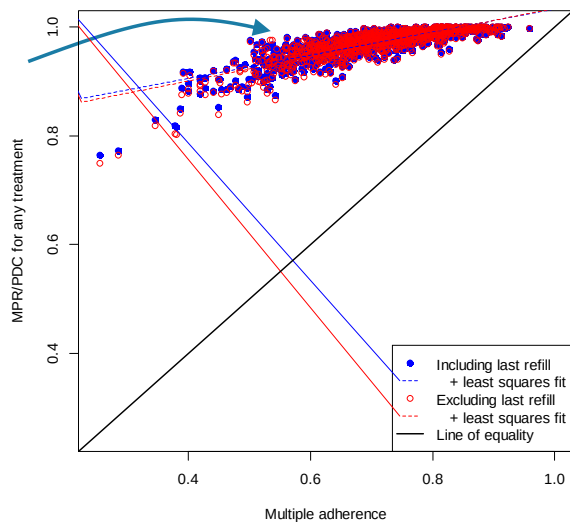
Methods for Measuring Multiple Medication Adherence: A Systematic Review-Report of the ISPOR Medication Adherence and Persistence Special Interest Group. Value Health. 2019. 22(2):139-156.

For this case –
significant bias,
overestimating
adherence



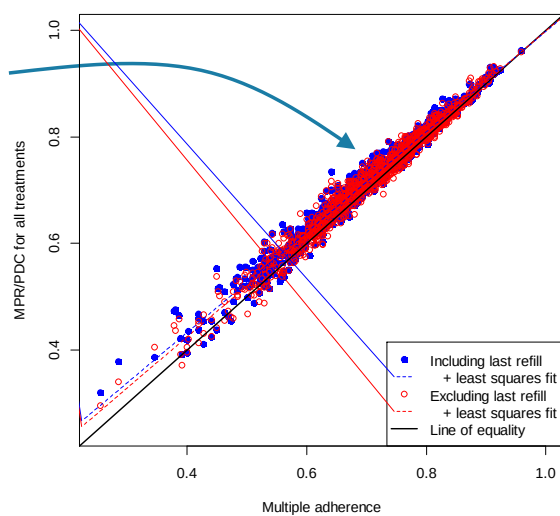
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Again – significant bias, further overestimating



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For this scenario these measures were less biased



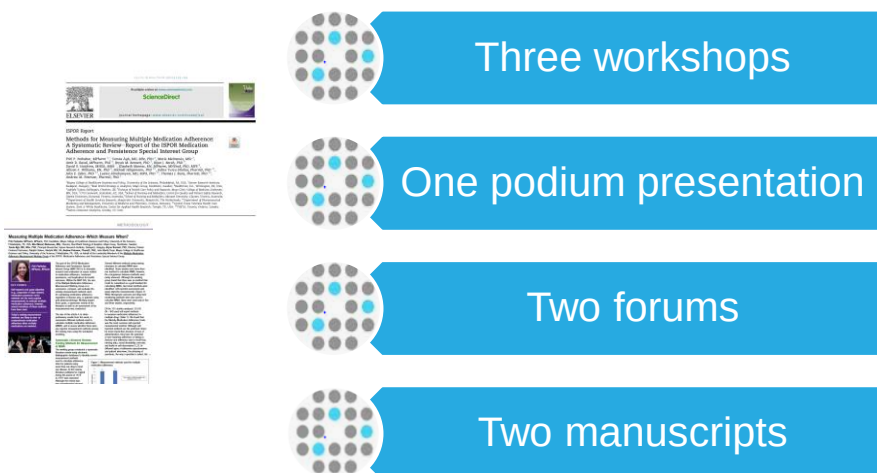
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Learnings so far

- Methodological approaches for measuring MMA differ by study design and disease area
- There is no single quasi-objective measure which is preferred. However, PDC and MPR were most commonly used quasi-objective measures
 - Several different variations of calculation methods
- Self-report measures were the most commonly used measurements in the literature
 - Need further research to examine their validity in reliability in different disease settings
- The majority of derived adherence measurements seems to overestimate adherence
- MPR/PDC separately derived for all medications seems to work best

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SPECIAL INTEREST GROUP OUTCOMES



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Potential key projects

Validating previous research on multiple medication adherence measurements using real world data

Background

- From our previous research it was seen that the majority of derived adherence measurements overestimated adherence

Aims

- Validate the findings from the previous simulations using real world data
- Conduct a gap analysis of the measurements

Outline

- Evaluating previous findings using RWD from preferable two different sources (Sweden and US)
- In Sweden use two different sources (one including the “true” values for adherence)

Outcome

- Establish if we reach the same results as in the simulations
- If we do, provide recommendations for improvements of the measurements

Assessment of medication adherence-enhancing interventions (MAEIs)

Background

- Several MAEIs have been developed in recent years; nevertheless, there is limited evidence on how to evaluate these interventions in real-world settings

Aims

- To systematically collect relevant criteria for evaluating MAEIs in real-world settings
- To identify stakeholder perspectives & scopes
- To measure the relative importance of the identified criteria by considering different stakeholder perspectives

Outline

- Scoping review:
 - To identify published criteria
- Survey:
 - To identify stakeholder perspective
 - To identify alternative criteria
 - To weight criteria
- Evidence synthesis
- Manuscript to submit to ViH

Priority

- A better understanding on this topic would help decision makers to set priorities
- This study could serve the basis for developing a multiple-criteria decision analysis (MCDA) tool for assessing MAEIs

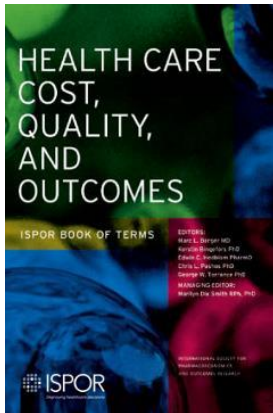
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SECTION

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Member engagement projects

ISPOR Book of Terms



Each term is defined, explain the term's use and value, describe issues related to it, and list related terms

Brief Definition: 1 – 2 sentences

Bibliography: 3 - 5 current references

Timeline: completed by March 2020

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Next Steps

Sign up:

- Book of Terms
- Key projects - Only sign up for one project
 - Validating previous research on multiple medication adherence measurements using real world data
 - Assessment of medication adherence-enhancing interventions (MAEIs)
- Submit the two projects for approved to ISPOR
- Kick-off the working groups

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Sign up as a Special Interest Group Member



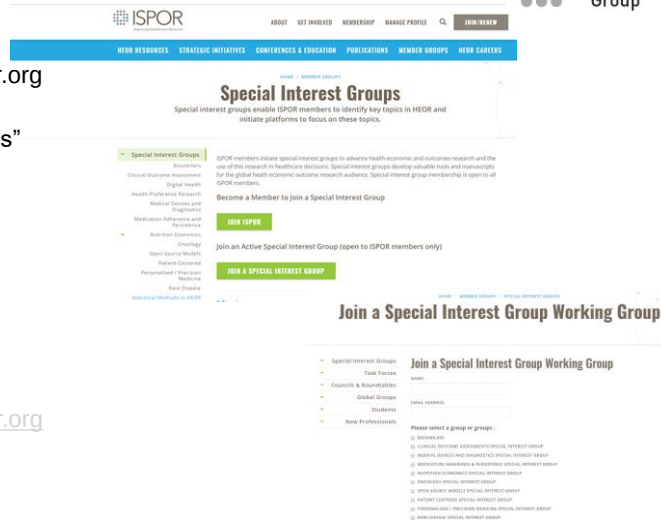
Visit ISPOR webpage www.ispor.org

- Select "Member Groups"
- Select "Special Interest Groups"
- Click button to "Join A Special Interest Group"
- Complete the form

Sign up now

- Sign up sheet
- Provide a business card

Or email: scientificgroups@ispor.org



The screenshot shows the ISPOR website's 'Special Interest Groups' section. It includes a navigation bar with links like 'HOME', 'MEMBER GROUPS', 'SPECIAL INTEREST GROUPS', 'ABOUT', 'GET INVOLVED', 'MEMBERSHIP', 'MANAGE PROFILE', 'JOIN-RENEW', 'NEW RESOURCES', 'STRATEGIC INITIATIVES', 'CONFERENCES & EDUCATION', 'PUBLICATIONS', 'MEMBER GROUPS', and 'NEW CAREERS'. The main heading is 'Special Interest Groups' with a subtext: 'Special interest groups enable ISPOR members to identify key topics in HEOR and initiate platforms to focus on these topics.' Below this, there are two main sections: 'Special Interest Groups' and 'Join a Special Interest Group Working Group'. The 'Special Interest Groups' section lists various topics such as Biometrics, Clinical Outcome Measurement, Digital Health, Health Preference Research, Medical Devices and Diagnostics, Medication Adherence and Persistence, Nutrition Economics, Oncology, Open Source Health, Patient Centred, Personalized / Precision Medicine, and Public Health. The 'Join a Special Interest Group Working Group' section includes a form with fields for 'Name', 'Email', and 'Phone', and a list of topics to select a group or groups from, including Biopharmaceuticals, Clinical Outcome Measurement, Clinical Research, Medical Devices and Diagnostics, Medication Adherence and Persistence, Nutrition Economics, Oncology, Open Source Health, Patient Centred, Personalized / Precision Medicine, and Public Health.