

Welcome to **IMMPACT-II**

Initiative on **M**ethods, **M**easurement, &

Pain **A**ssessment in **C**linical **T**rials

Acknowledgement

Support for this meeting was provided by
unrestricted educational grants to the
University of Rochester Office of
Professional Education by:

Abbott Laboratories

AstraZeneca

Elan Pharmaceuticals

Endo Pharmaceuticals

Eli Lilly & Co.

GlaxoSmithKline

Johnson & Johnson

Merck & Company

NeurogesX, Inc.

Novartis Pharmaceuticals

Pfizer

Purdue Pharma

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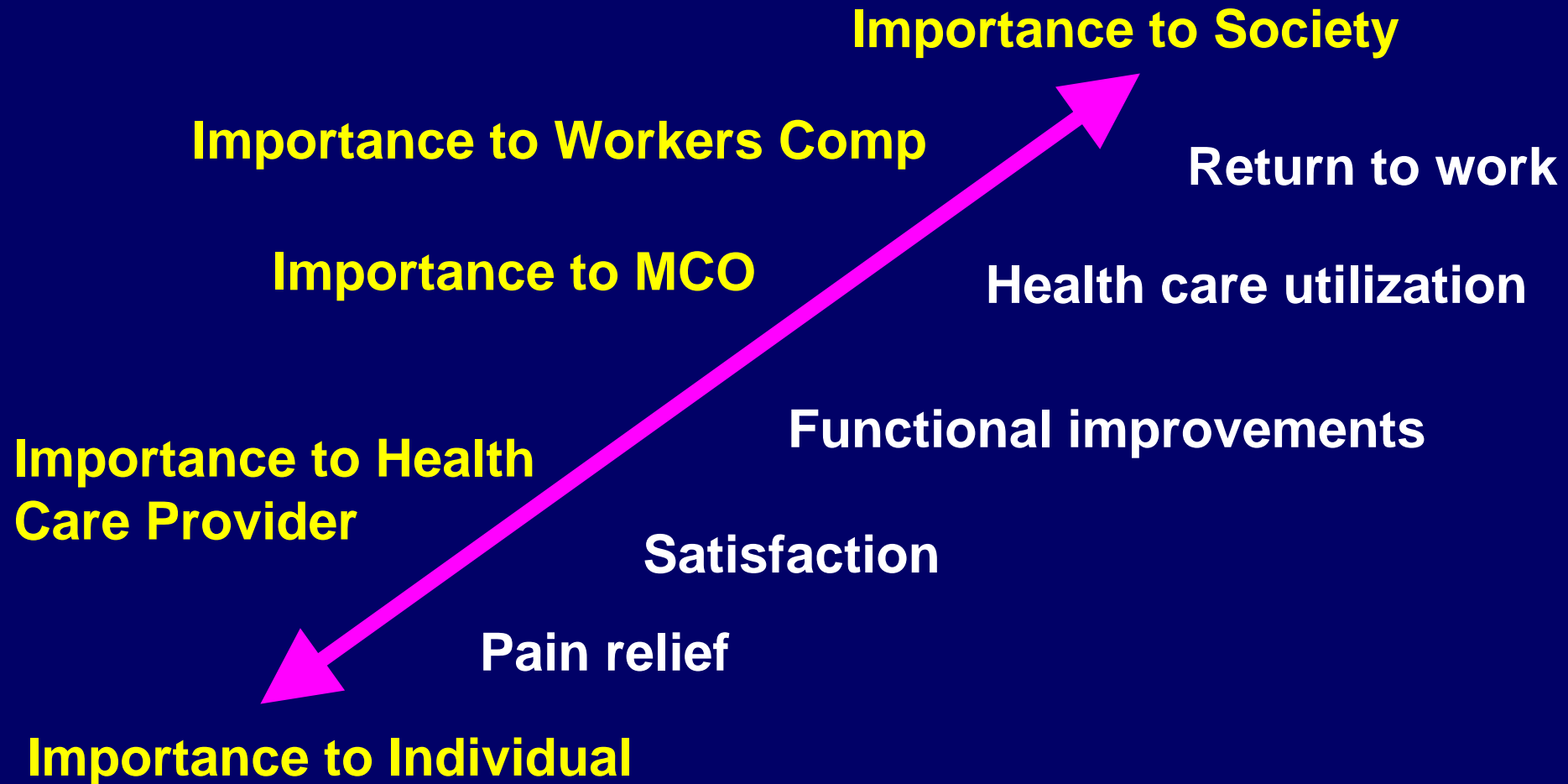
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Participants (cont'd)

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Lynn Kramer, MD Purdue Pharma	Jennifer Haythornthwaite, PhD Johns Hopkins Univ	Penny Cowan Am Chronic Pain Assoc.
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Nathaniel Katz, MD New York	John Farrar, MD, MSCE Univ Penn	Daniel Carr, MD New England Medical Ctr.
Mark Jensen, PhD Univ Washington	Robert Dworkin, PhD Univ Rochester	Nicholas Bellamy, MD Univ. Queensland
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Criteria of Success, for Whom?



Simple Question(s) for IMMPACT

Is “this” treatment effective?

- **On what outcomes?**
- **Measured in what way?**
- **Using what study design?**
- **Based on statistical & clinical significance?**
- **Compared to what alternatives?**
- **For whom?**
- **At what cost?**

“When the right thing can only be measured poorly, it tends to cause the wrong thing to be measured well. And it is often much worse to have good measurement of the wrong thing -- especially when, as is so often the case, the wrong thing will IN FACT be used as an indicator of the right thing -- than to have poor measurement of the right thing.”

John Tukey, 1979

Primary Outcome Domains for Chronic Pain Clinical Trials: Consensus from IMMPACT- I

- 1. Pain (the pivotal outcome)**
- 2. Physical functioning**
- 3. Emotional functioning**
- 4. Patients ratings of improvement and satisfaction with treatment**
- 5. Negative health states and adverse events**
- 6. Patient disposition (including adherence to the treatment regimen, reasons for premature withdrawal from trial, and loss to follow-up)**

Supplemental Outcome Domains for Chronic Pain Clinical Trials: Consensus from IMMPACT- I

- 1. Role functioning (I.e., work and educational activities)**
- 2. Interpersonal functioning (relationships and activities)**
- 3. Coping**
- 4. Pharmacoeconomic measures and health care use**
- 5. Biological markers**
- 6. Clinician or surrogate ratings of global improvement**
- 7. Neuropsychological assessment of cognitive & motor functioning**
- 8. Suffering and other end-of-life issues**

Objectives, Goals, & Scope of Meeting

- I. Develop consensus on means for assessing each of the 6 core domains identified at IMMEDIATE – I meeting**
- II. Goals and scope of meeting**
 - A. Review means of assessing each of the 6 core domains**
 - B. Discuss advantages and disadvantages of methods recommended in commissioned paper**
 - C. Determine what methods or measures should be used to assess outcomes in pain clinical trials (publish manuscript)**
- III. Beyond scope of the current meeting**
 - A. Discussion of means of assessing supplemental domains**
 - B. Discussion of definition of clinical significance**
 - C. Discussion of design of clinical trials**
 - D. Discussion of primary endpoints & strategies for analyses of multiple end points**

Tentative Agenda

Friday, April 11th (morning)

- | | |
|--------------------|---|
| 8:00 am - 8:45 am | Welcome, sponsorship, and faculty introductions, Objectives, goals and scope, update. D. Turk, R. Dworkin |
| 8:45 am - 9:00 am | Reliability, validity, responsiveness
R. Dworkin |
| 9:00 am – 9:15 am | Pain Assessment: Overview, M. Jensen |
| 9:15 am – 10:00 am | Pain Assessment: Discussion,
M. Jensen, R. Dworkin |
| 10:00am – 10:30 pm | Beverage Break |

Tentative Agenda

Friday, April 11th (morning)

10:30 am - 11:00 am Pain Discussion: Continued, M. Jensen,
R. Dworkin

8:45 am - 9:00 am Reliability, validity, responsiveness
R. Dworkin

9:00 am – 9:15 am Pain Assessment: Overview, M. Jensen

9:15 am – 10:00 am Pain Assessment: Discussion,
M. Jensen, R. Dworkin

11:00am – 11:15 am Physical functioning, generic
measures:

Overview, G. Stucki

Tentative Agenda

Friday, April 11th (afternoon)

11:15 am - 12:00 noon Physical functioning, generic measures:
Discussion, G. Stucki, D. Turk

12:00 noon - 1:00 0m Luncheon

1:00 pm – 1:30 pm Physical functioning, generic measures
continued, G. Stucki, D. Turk

1:30 pm – 1:45 pm Physical functioning, pain specific:
Overview , J. Haythornthwaite

1:45pm – 3:00 pm Physical functioning, pain specific:
Discussion, J. Haythornthwaite, R.

Dworkin

Tentative Agenda

Friday, April 11th (afternoon & evening)

- | | |
|-------------------|--|
| 3:00 pm - 3:30 pm | Beverage break |
| 3:30 pm - 3:45 pm | Emotional functioning: Overview, R. Kerns |
| 3:45 pm – 5:00 pm | Emotional functioning: Discussion, R. Kerns, D. Turk |
| 6:45 pm | Charter transportation to off-site dinner departs from Willard (Meet in hotel lobby by 6:40) |
| 7:00pm - 9:30 pm | Dinner at B. Smith's in Union Station |

Tentative Agenda

Friday, April 11th (morning)

- | | |
|--------------------|---|
| 8:00 am - 8:45 am | Welcome, sponsorship, and faculty introductions, Objectives, goals and scope, update. D. Turk, R. Dworkin |
| 8:45 am - 9:00 am | Reliability, validity, responsiveness
R. Dworkin |
| 9:00 am – 9:15 am | Pain Assessment: Overview, M. Jensen |
| 9:15 am – 10:00 am | Pain Assessment: Discussion,
M. Jensen, R. Dworkin |
| 10:00am – 10:30 pm | Beverage Break |

Tentative Agenda

Saturday, April 13th (morning)

- | | |
|--------------------|--|
| 7:30 am - 8:00 am | Continental breakfast |
| 8:00 am - 8:30 am | Pt global rating of improvement/satisfaction:
Overview, J. Farrar |
| 8:30 am – 9:30 am | Pt global rating: Discussion, J. Farrar,
R. Dworkin |
| 9:30 am – 10:00 am | Negative health states/events: Overview,
N. Katz |
| 10:00am – 10:30 pm | Negative health states/events: Discussion.
N. Katz, D. Turk |

Tentative Agenda

Saturday, April 12th (morning & afternoon)

- | | |
|---------------------|--|
| 10:30 am - 11:00 am | Beverage Break |
| 11:00 am - 11:30 am | Negative health states/events,
Discussion, N. Katz, D. Turk |
| 11:30 am – 11:45 am | Pt Disposition/CONSORT: Overview,
D. Turk |
| 11:45 am – 12:30 pm | Pt Disposition/CONSORT: Discussion,
D. Turk, R. Dworkin |
| 12:30pm – 1:30pm | Luncheon |

Tentative Agenda

Saturday, April 12th (afternoon)

- | | |
|-------------------|---|
| 1:30 pm - 3:30 pm | Review and consensus on recommended measures, R. Dworkin, D. Turk |
| 3:30 pm - 3:45 pm | Beverage Break |
| 3:45 pm - 5:00 pm | IMMPACT Future Directions, R. Dworkin, D. Turk |

Endorsement of the CONSORT Statement

CONSORT

Consolidated **S**tandards

of **R**eporting **T**rials

CONSORT

Checklist of Items to include when reporting a randomized trial

Title and abstract

Introduction and background

Methods

- ✓ Participants
- ✓ Interventions
- ✓ Objectives
- ✓ Outcomes
- ✓ Sample Size
- ✓ Randomization
 - Sequence generation
 - Allocation concealment
 - Implementation
- ✓ Blinding
- ✓ Statistical Methods

Results

- ✓ **Participant Flow**
- ✓ Recruitment
- ✓ Baseline data
- ✓ Numbers analyzed
- ✓ Outcomes and estimation
- ✓ Ancillary analyses
- ✓ Adverse events

Discussion

- ✓ Interpretation
- ✓ Generalizability
- ✓ Overall evidence

Flow of Participants

<u>Stage</u>	<u>Number Included</u>	<u>Number Not Included</u>
Enrollment	Pts. evaluated for enrollment	# did not meet inclusion criteria # meet inclusion but declined tx.
Randomization	Pts. randomized	
Tx Allocation	Pts. who received tx. as allocated, by grp.	Pts. who did not receive tx. as allocated, by grp.

Flow of Participants (cont'd)

<u>Stage</u>	<u>Number Included</u>	<u>Number Not Included</u>
Follow-up	# completed tx as allocated, by group	# did not complete tx. as allocated, by grp.
	# completed f/u as planned, by grp.	# did not complete f/u as planned, by grp
Analysis	Pts.included in main analysis, by grp.	Pts. excluded from main analysis, by grp.

CONSORT

Flow Diagram

Enrollment

Assessed for eligibility ($n = \dots$)

Excluded ($n = \dots$)
Did not meet inclusion criteria ($n = \dots$)
Refused to participate ($n = \dots$)
Other reasons ($n = \dots$)

Randomized ($n = \dots$)

Allocation

Allocated to intervention ($n = \dots$)
Received allocated intervention ($n = \dots$)
Did not receive allocated intervention (*give reasons*) ($n = \dots$)

Allocated to intervention ($n = \dots$)
Received allocated intervention ($n = \dots$)
Did not receive allocated intervention (*give reasons*) ($n = \dots$)

Cont'd

Follow-up

Lost to follow-up ($n = \dots$)
(*give reasons*)

Discontinued intervention
(*give reasons*) ($n = \dots$)



Analysis

Analyzed ($n = \dots$)

Excluded from analysis
(*give reasons*) ($n = \dots$)

Lost to follow-up ($n = \dots$)
(*give reasons*)

Discontinued intervention
(*give reasons*) ($n = \dots$)



Analyzed ($n = \dots$)

Excluded from analysis
(*give reasons*) ($n = \dots$)

PATIENT DISPOSITION

Requirements for Positive Outcomes in Clinical Trials

- 1. Treatment must have a positive impact on condition or symptoms**
- 2. Patient must follow the prescribed regimen**

Different Forms of Nonadherence

- **Failure to follow treatment as prescribed –
too little,
too much,
different schedule,
use of concomitant treatments**
- **Missed appointments**

Factors Related to Nonadherence

- **Patient variables** (e.g., disposition, forgetfulness, confusion, apathy, pessimism, beliefs, expectations)
- **Disease or disorder variables** (e.g., stability of symptoms)
- **Treatment variables** (e.g., complexity of treatment regimen, inadequate instructions, size of pills, taste, side effects)
- **Relationship variables** (e.g., inadequate communication)

Methods to Measure Nonadherence

- ✓ Interview, clinical ratings
- ✓ Self-report, Self-monitoring behavior and symptoms
- ✓ Pill counts
- ✓ Tallies of refills
- ✓ Marked-sign techniques (inactive or false marker embedded in treatment package)
- ✓ Biochemical indicators (e.g., chemical tracers)
- ✓ Record of appointments

Concomitant treatments initiated during a trial from a trials often reflect inadequate pain relief or distressing, uncontrolled side effects.

Reasons why subjects in clinical trials may be lost to follow-up:

- Inadequate pain relief
- Adverse events
- Dissatisfaction with trial personnel
- Resolution of symptoms
- Change of living circumstances

In addition to CONSORT detailed information about each of the following should be reported:

- **Protocol violations** -- number and nature (e.g., use of prohibited medications, unauthorized dose change)
- **Concomitant treatment** – e.g., all medication, unscheduled visits for health care
- **Nonadherence** -- reasons and prevalence of each type
- **Premature withdrawal** – reasons and prevalence of each type
- **Loss to follow-up** – reasons and prevalence of each type

Assess the **PERSON** . . .

Not just the

PAIN!!!