



National Drug Abuse Treatment Clinical Trials Network

September 21, 2011

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Development of an Electronic Medical (Health) Record in Substance Use Disorders

**Ramifications for
Patient Care & Research**

What is an EM(H)R ?

*“aggregated electronic record of health-related information on an individual that is created and gathered cumulatively **across more than one health care organization** and is managed and consulted by licensed clinicians and staff involved in the individual’s health and care”*

National Alliance for Health Information Technology

EMR vs. EHR:

Same data elements, but varies on who owns it and where it is stored.

Federal Mandate of Adoption

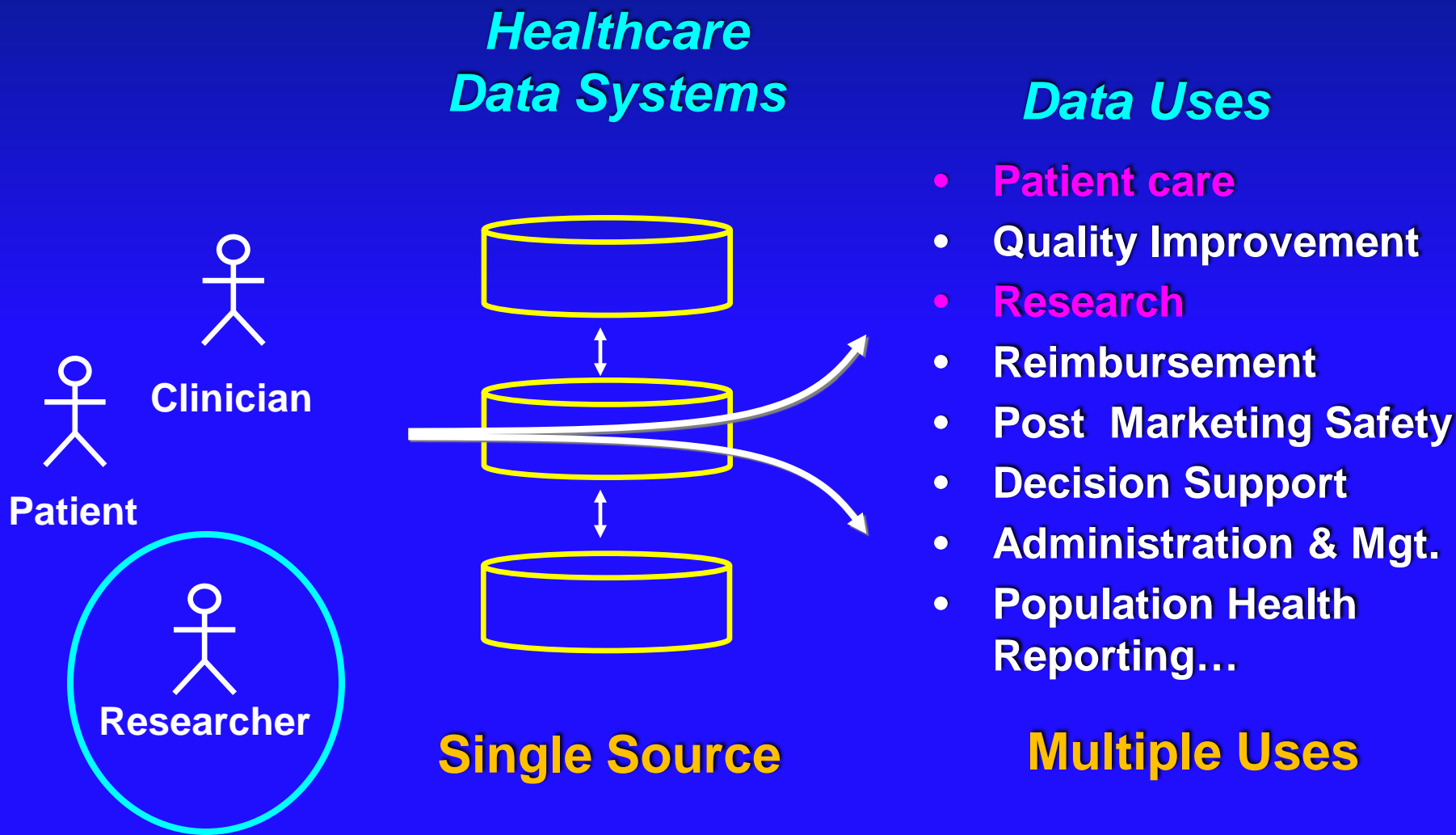
2009 ARRA

- **DHHS Office of National Coordinator of HIT (ONC) with \$19 billion program**
- **Definitions on “certified EHR” & “meaningful use”**
- **Financial incentives to promote the adoption and meaningful use of certified EHRs**
- **All medical records must be digitized by 2015 for CMS reimbursement**

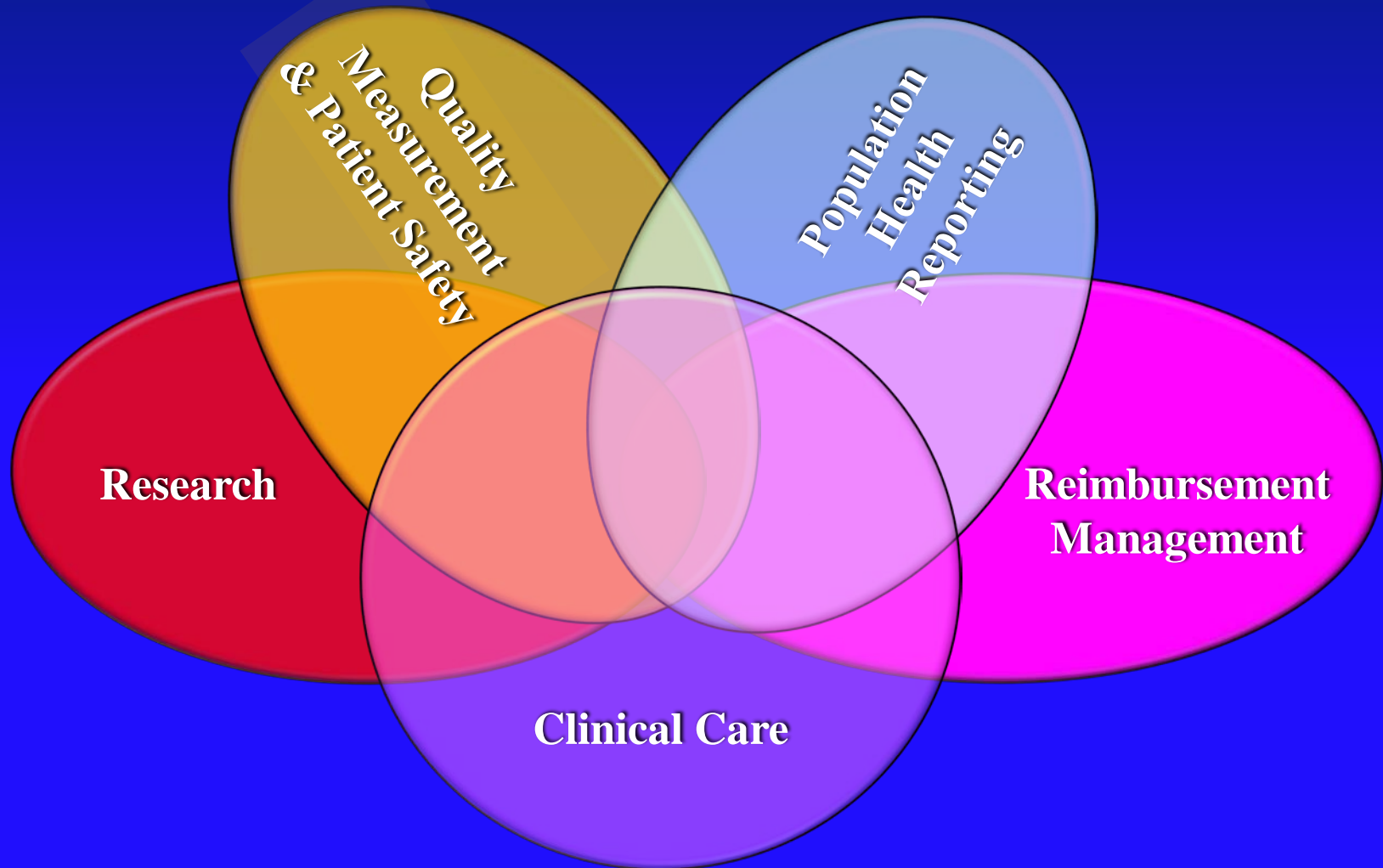
Blumenthal D. NEJM. 2009; 360(15):1477-1479.

Blumenthal, D. & Tavenner, M. NEJM. 2010; 363(6):501-504.

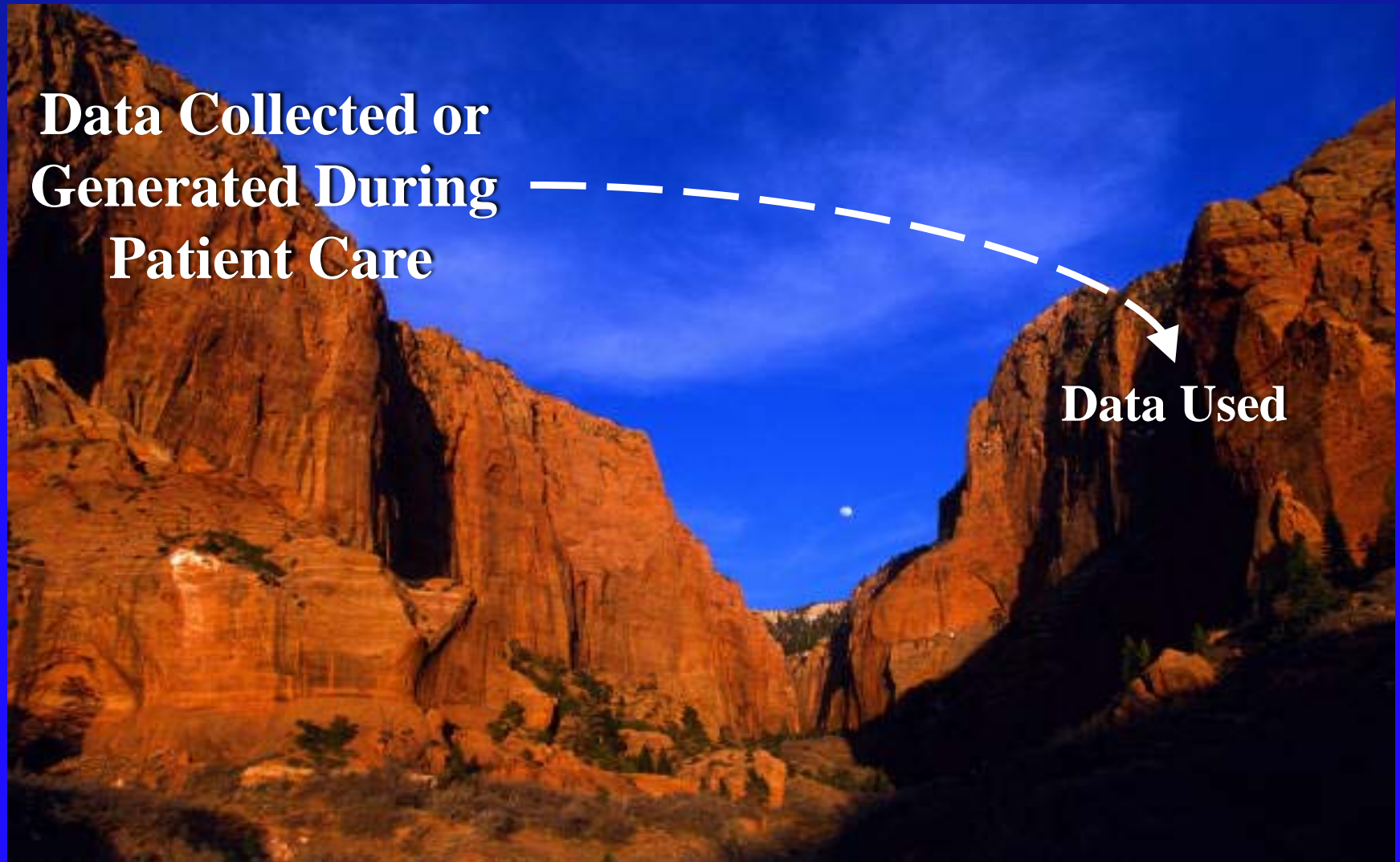
Goal: Exchange and Use of Data



Uses of Data Have Significant Overlap



The Problem - Data Exchange

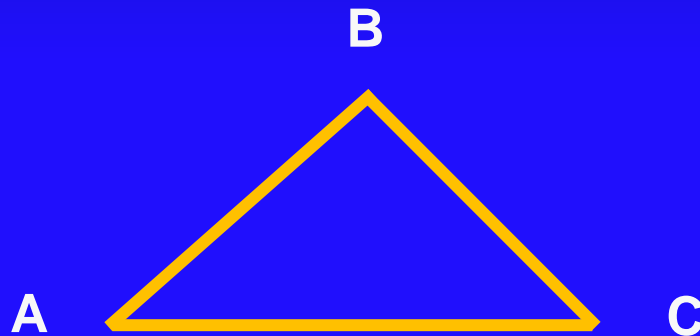


What Is Interoperability?

*...the ability of health information systems **to exchange and use** healthcare information within and across organizational boundaries to advance the effective delivery of healthcare for individuals and communities.*

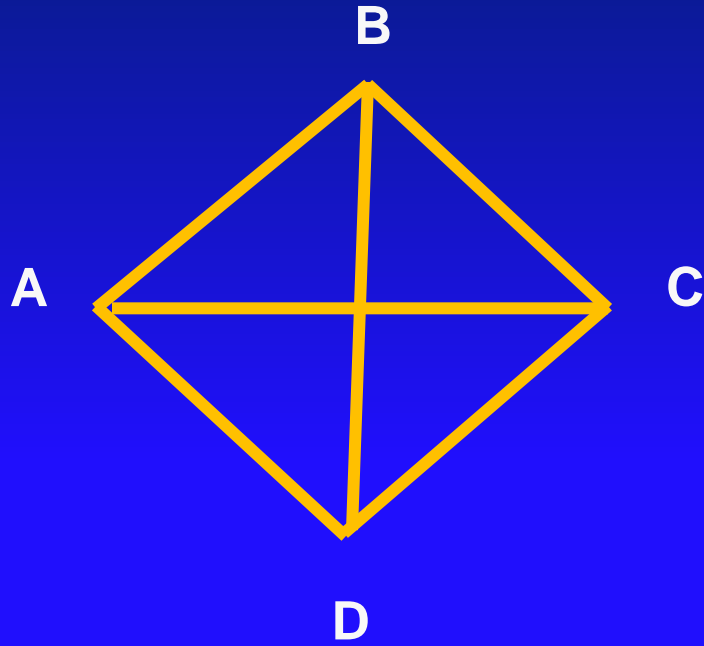
Health Care Information and Management Systems Societies 2006

The Interface Battle

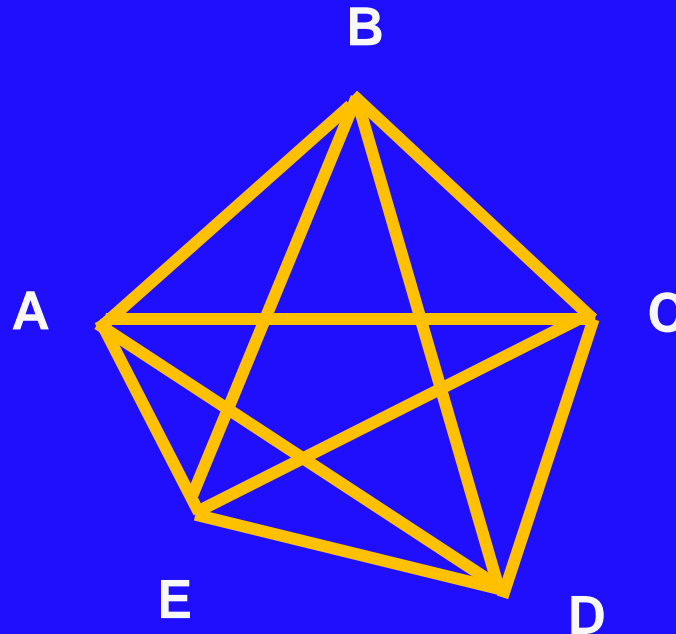


3 systems, 3 interfaces

The Battle Lines Are Drawn



4 systems, 6 interfaces



5 systems,
10 interfaces

...And so on!

Systems	Interfaces
6	15
8	28
10	45
20	190
30	435
40	780
50	1225
100	4950

And the math gets really ugly after that!

Syntax vs. Semantics

- The dog eats **red meat**.
- The dog eats **blue trees**.
- **Time** flies like an **arrow**.
- **Fruit** flies like a **banana**.
- **Syntax** → *Structure*
- **Semantics** → *Meaning*

....and then there's Context

'He threw his hat into the ring....'

'He's got a chip on his shoulder...'

Aspects of Interoperability

- Standards enable **interoperability** of healthcare information
- Three aspects of interoperability
 - **Technical:**
 - Moving data from *system A* to *system B*
 - **Semantic:**
 - Ensuring that *system A* and *system B* understand the data in the same way
 - **Process:**
 - Enabling business processes at organizations housing *system A* and *system B* to work together

Interoperability? Common Data Elements (CDEs)!



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Robert Gore-Langton, PhD
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Data and Statistics Center 2
The EMMES Corporation

Why SBIRT in Primary Care?

Forces Gathering to Mainstream SUD into Larger Health Care Domain

The Push Forces

1. Healthcare Costs
2. Healthcare Reform Legislation
3. Parity Legislation
4. Prescription Opioid Overdose

The Pull Forces

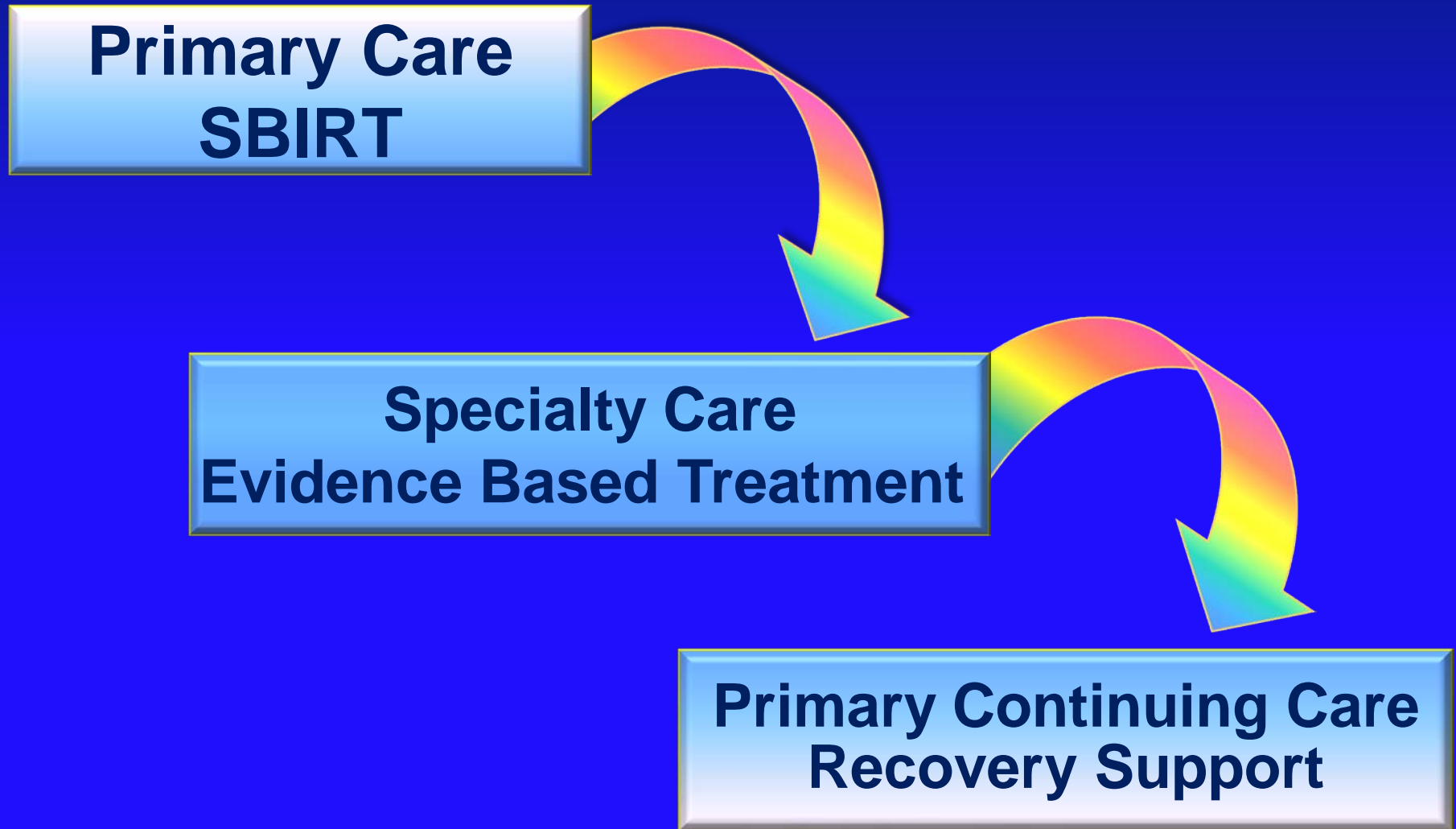
1. Improved Patient Safety
2. Improved Care Quality
3. Improved Medical Options
 - a. Medications
 - b. Interventions – SBI
4. Better Insurance Coverage

EHRs are essential

Future Benefits for SUD Treatment

- **Physician Visits – 100%**
 - Screening, Brief Intervention, Assessment
 - Evaluation and medication – Tele monitoring
- **Clinic Visits – 100%**
- **Home Health Visits – 100%**
 - Family Counseling
- **Alcohol and Drug Testing – 100%**
- **4 Maintenance and Anti-Craving Meds – 100%**
- **Smoking Cessation – 100%**

A Continuing Care Model



Integrated Care Model

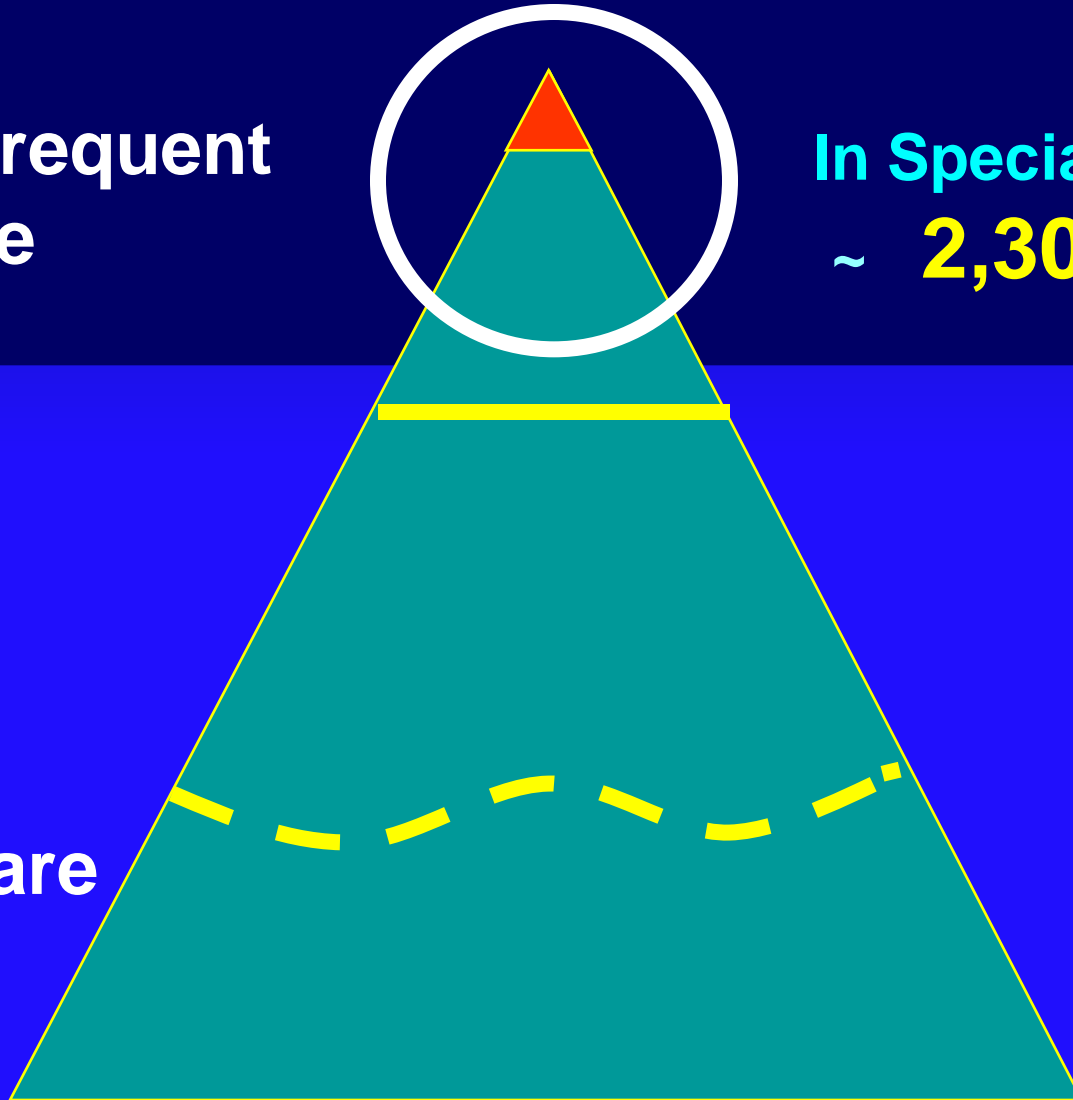
- 1. One organization, routine behavioral health screening under the same system**
- 2. Located in the same physical location**
- 3. Single treatment plan for both medical & behavioral components**
- 4. Team approach for care delivery**
 - Physician**
 - Nurse/Nurse practitioners**
 - PA/Case manager**
 - Family advocate**
 - Behavioral health counselor**

Addiction Treatment

**Very Frequent
Use**

**In Specialty Treatment
~ 2,300,000**

**Very Rare
Use**

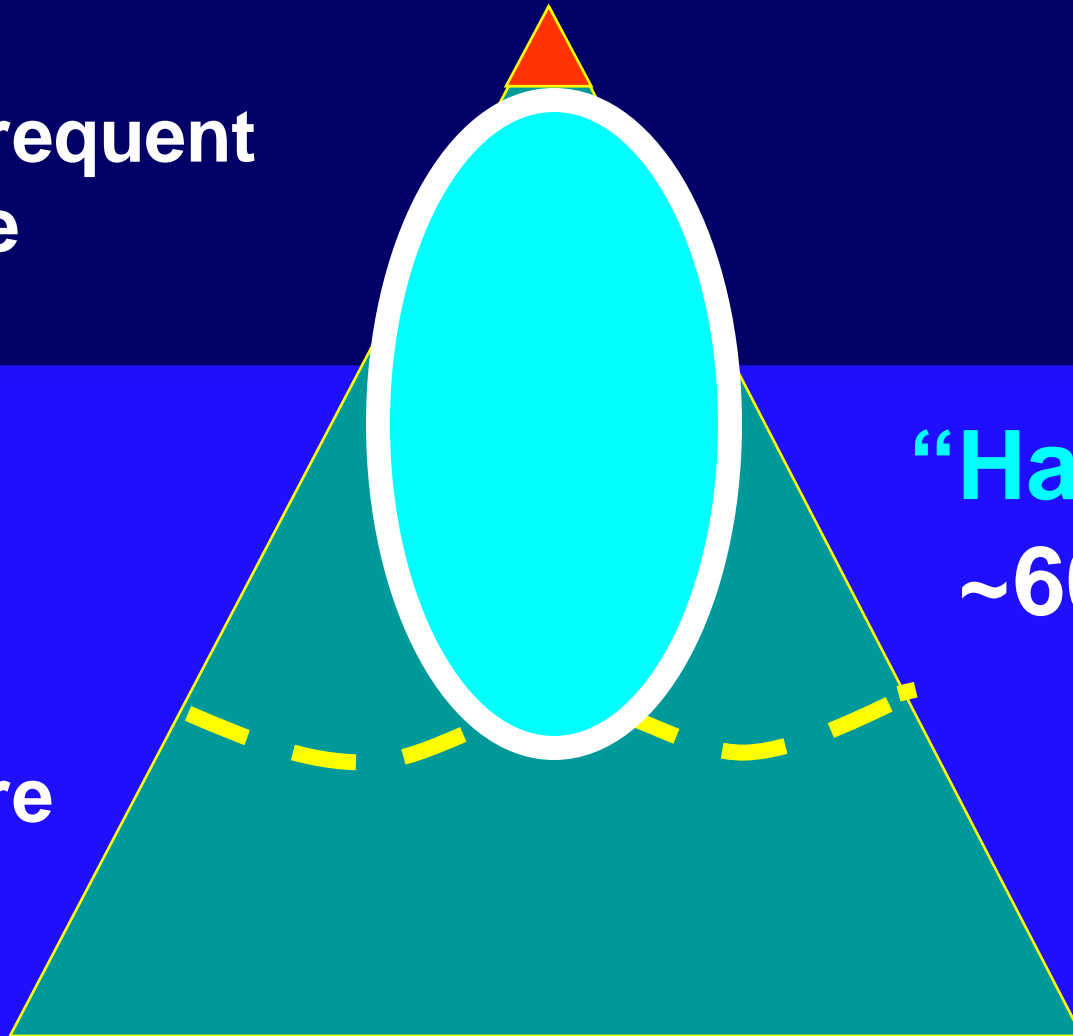


Substance Use Disorder Care

Very Frequent
Use

“Harmful Use”
~60,000,000

Very Rare
Use



Next Steps



- Collaborate with NLM/SAMHSA
- Place core set of CDEs into EHRS platforms
 - Permits validation in real world practice
 - E.g. **SBIRT** in various care settings
- Critical to assess
 - Feasibility
 - Interoperability
 - General utility
 - “New” clinical procedures fostered -SBIRT

Concluding Points

1. SUD treatment will become **integrated** into healthcare.
2. Primary care will be **primary care** for SUDs.
3. Care for “Substance Use Disorders” will involve different patients, providers, and methods – **information exchange by EHRs** will be key.

Give Us Your Feedback!!

Thank You

Acknowledgements

- **EMMES Corp**
 - Bob Lindblad, M.D.
 - Paul Van Veldhuisen, Ph.D.
 - Rob Gore-Langton, Ph.D.
 - Brian Campbell
- **NIDA CTN**
 - John Rotrosen, M.D.
 - CTN Special Interest Group on EMR
 - CTN CTPs
- **NIDA CCTN**
 - Udi Ghitza, Ph.D.
 - Steve Sparenborg, Ph.D.
 - Paul Wakim, Ph.D.
 - Carol Cushing, R.N.
 - Geetha Subramaniam, M.D.
- **NIDA DESPR**
 - Sara Duffy, Ph.D.
- **You**
 - The audience