HOW ROCKET SCIENCE, BIG BUSINESS, AND BISBEE, ARIZONA WILL TRANSFORM THE PUBLIC SECTOR

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Research to Practice

No. No.
That's not right!

Practice-to-Research-to-Practice-to-Research

Or better yet…
Research in Practice

What Works?

- Most of our public policies have one thing in common: they have never been rigorously tested
- Rigorous evaluations traditionally involve professional researchers, extramural funders, yards of red tape, and long timelines
- As a result, policies intended to make us smarter, safer, or healthier are based more on intuition ("feels right") than on data

Who Conducts the Research?

☐ 58% of programs for drug-involved offenders that are called "Evidence Based" Programs (EBP) were evaluated by the developer or proprietor

☐ Is there a systematic difference in the results of evaluations conducted by the proprietor compared with independent evaluations?
Yes, and in the direction you would suspect!

The State of EBPs

- 14% "quality evidence"
- Some good programs. Many less good. Hard for practitioners to recognize which is which
- Challenge of transferability. An EBP (even if based on good data) that works well in place A might not work well in place B
- We need a new approach for creating knowledge
- HOME-grown EBPs – YOUR EVIDENCE!

A Trial that Changed My Thinking

- We launched a randomized controlled trial (RCT) of a probation program called HOPE in 2007
- By most standards it was a really neat RCT
  - We found impressive results
  - The program is being replicated by other researchers
  - 30 states have implemented the program
  - It has worked its way into the president's budget
- I should be happy, right?

Responses to the HOPE Trial

- Federal funders begin to rally
- The US DOJ funds a costly national HOPE demonstration experiment in four states
- Results expected in 2016. *Meanwhile…*
- HOPE is evolving. DOJ is evaluating the original model (that's no longer in place) in four new jurisdictions and results will be released 10 years (!) after we first learned of HOPE

The Snail Trail

- Typical timeline from birth of an idea, through the funding cycle, to study completion is *7 years*
- Ave. term of DOC secretary is only **2** years
- Ave. term of HHS secretary is 18 months
- Costs of testing are enormous
- Many programs/improvements "feel nice"
- Many programs are based on "feel nice" because we have made it so hard, so expensive, and so loooooong to test
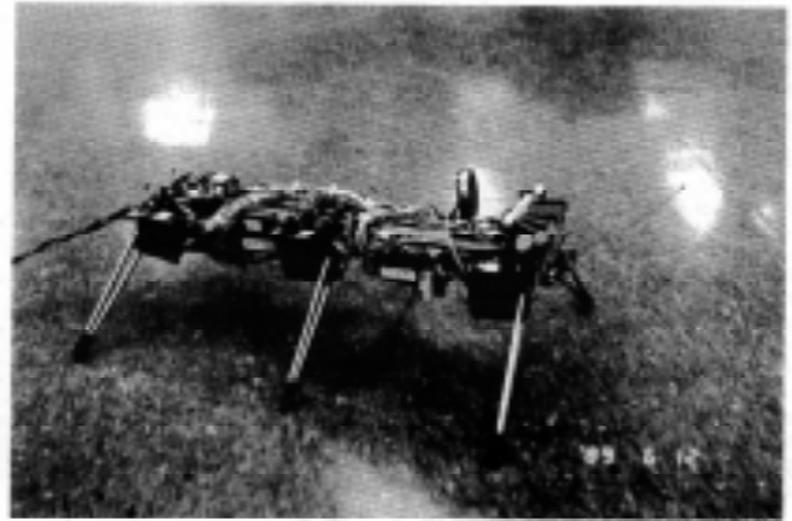
Amidst the Frustration…

- Four events shake things up
  - A paper ("Fast, Cheap and Out of Control")
  - A call from Bisbee, Arizona
  - A meeting at the W Hotel in Los Angeles
  - Subway (sandwiches, not trains)

FAST, CHEAP AND OUT OF CONTROL: A ROBOT INVASION OF THE SOLAR SYSTEM

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Complex systems and complex missions take years of planning and force launches to become incredibly expensive. The longer the planning and the more expensive the mission, the more catastrophic if it fails. The solution has always been to plan better, add redundancy, test thoroughly and use high quality components. Based on our experience in building ground based mobile robots (legged and wheeled) we argue here for cheap, fast missions using large numbers of mass produced simple autonomous robots that are small by today's standards (1 to 2 Kg). We argue that the time between mission conception and implementation can be radically reduced, that launch mass can be slashed, that totally autonomous robots can be more reliable than ground controlled robots, and that large numbers of

Bisbee, AZ

- A call with a probation chief
- He wants to try something *similar* to HOPE
- I explain that with funding mechanisms and timelines, if all goes well he'd have findings in 3 to 4 years (he was planning to retire within 2 years)

OR

He could start tomorrow

- So he did…

The W Hotel

- I meet a bereaved father who lost his son to addiction
- He asks what we should be doing to have fewer tragedies like his
- I say we are flailing: we need innovation and more, better quality studies
- I learn about the hotel basement and I'm embarrassed for my field—
  - The W knows more about how you respond to the placement of a light switch than we know about what offenders respond to
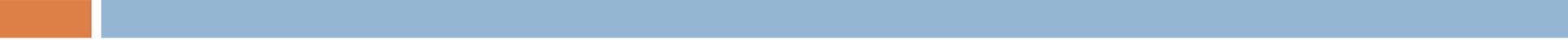
Subway Sandwiches

- Big companies (Subway, Walmart) routinely rely on trials to improve operations
- Where should the daily special be posted? How many stacks of napkins and how far from the register?
- Small details add up to major operational efficiencies → lower costs and better service
- Our public agencies neeed both…

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- Removes barriers to conducting rigorous evaluations
    - seeks to make these the norm rather than the exception
- Goal is homegrown, practitioner-led trials
- Most rigorous test of an intervention—an RCT—is also the simplest to interpret
- Provides <u>free</u> support so practitioners can conduct RCTs
    - minimal cost
    - contribute to evidence registry with more scope, rigor, and practical value than anything to date
- It took an inspired funder … BETAGOV is unconventional

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- We go to new wells seeking new ideas
  - Academics not always well suited to be authors of innovation (often far removed from practice)
  - Field-based innovations
    - Staff-initiatives
  - Recipient-led innovations
  - Operations observation

A Few Examples of BₑₜₐGₒᵥ in Action

What Will Motivate *Me*?
Suggestions from Female Inmates in WA

- Cosmetics
- Colorful towels/linens
- Colorful t-shirts
- Meals in the dayroom
- Hair accessories
- Hoodies
- Manicures
- New oils/perfumes
- Mattress topper

- New pillow
- New water cup
- Special events
- Slippers
- Yard time
- Sneakers (real, not prison-issue)
- Larger selection of hygiene products (conditioner!)

What Will Help *Me* Comply?
Supermax Inmates

- Graduated re-integration (exiting isolation is terrifying)
  - "When I get anxious somebody gets hurt"
- Customized rewards
  - "Soap that smells nice calms me down"
- Sunlight
- Unstructured congregate programming
- Cake (once a month)
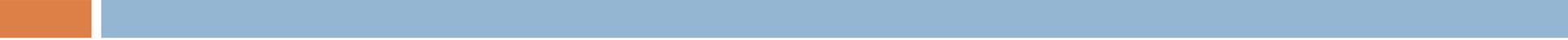
IMU Congregate Programming

Control - BAU   Intervention

Other Examples—
A Few of Many…

Text Message Appointment Reminders

Pre-Release Video Conferencing

Re-Integration (The Transition Pod)

Others

- Changing "atmosphere"
  - "Kudos corners" for staff
  - Staff motivation (data and hearing back)
  - Client engagement
  - Changing spaces

But then Came HHS

- First WY (TANF, CPS, and many others…)
- And now, KS (LIEAP, employment notifications, txt messaging)
- Anticipating adding other states by year end
- Our goal for 2016 is **multi-agency** trials

HHS Suggestions in Planning

- Changing cash assistance payment schemes
- Recruitment strategies for vocational training
- SCF responses for parents at risk of losing kids
- Lower cost (than nurse home visitation) for high-risk mothers
- Testing new service providers
- Improving client engagement and satisfaction, including modifying "spaces" (for clients and employees)

We Need Your Help

- We aspire to take testing to scale in all agencies
- Our goal is to inspire "Learning Institutions"
- We train and partner with "Pracademics"
- Please join our Practitioner think tank
- You are the experts and we need to learn from you (not research-to-practice!!)
- You have an idea? We want to know about it!
- We want to help you create YOUR evidence base
  - No cost support for your evaluations that involve RCTs
  - A team of PhDs, statisticians, and writers to guide you through your trials
  - We can be as involved or as uninvolved as you like

The Result?

- Large number of trials
- Small but high-quality studies that help signal what works and what doesn't
- Not all will be perfect, but in aggregate
  - provide evidence of which approaches (or changes to operational procedures) are worthy of further study
  - and which are not
- Let's learn from success *and* learn from failure
- Public-programming prospecting

BIG IDEA? Small idea?

Please innovate with us.

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