# Scaling AI for Operational Impact & ROI

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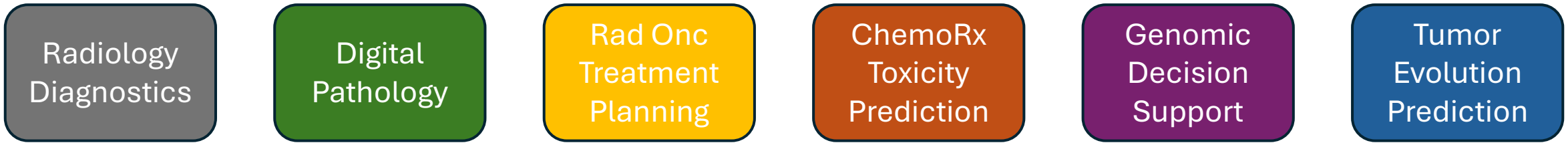
# Oncology-specific “AI intensities”



# Real-world AI observations

*(having worked in both)*

## Health Systems View

- Back-office, Rev Cycle, Ambient have growing penetration (and ROI)
- Clinical prediction rules lagging
- Federated adoption
- Governance maturing
- AI features (vs. complex models) coming fast and furious
- Seeking AI that operates quickly on core platforms (reduced tech sprawl)
- Want vendors that offer “durable” workflows driven by AI that produce tangible ROI
- Early days of ”agentic orchestration”

## Start-up Vendor View

- CIOs, CDOs, COOs, CMOs are now asking vendors the tough questions on ROI
- Vendors are buying what accelerates; building what differentiates
    - Extensive tooling exists now for marketing, sales, operations, back-office
- Maturing quickly towards demonstrable ROI and “orchestration”, which is driving exploration of “agentic” orchestration
- Governance maturity of health systems is highly variable, and can slow deployments
- Lots of “pilot-itis” by health systems

# Pilot-itis

*“the condition in which many pilots start in the absence of clear strategic alignment and fail to scale”*

- The majority of digital pilots don’t scale from alpha/beta/pilot to enterprise-wide deployment

- 80+% of AI pilots don’t make it into workflows that “survive”

- The intended impact and hard and soft ROI go unrealized

So, what is the Rx for this Dx?

# A Scalable AI “Rx”

Take daily as prescribed:

- AI-readiness of your data
- Strong sponsorship
- Change Readiness; Clinician Trust
- Responsible AI governance
- Operationalization expertise (repeatable processes for operational scaling and monitoring)
- Future-proofing infrastructure (easy plug-in on-ramps and off-ramps)

- Oh….and performant AI tools

# Promoting Responsible AI

## Responsibility

- ✓ Patient Safety
- ✓ Decision Support
- ✓ End-user training
- ✓ Algorithmo-vigilance
- ✓ Ethics
- ✓ Risk and Compliance
- ✓ Data governance
- ✓ IRB synchrony
- ✓ Vendor management

## Promotion

- ✓ AI Express Pass
- ✓ Speed-to-bedside
- ✓ Speed-to-science
- ✓ Adoption & Impact
- ✓ Scientific freedom
- ✓ Vendor acceleration
- ✓ Commercialization

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Article | Open access | Published: 04 July 2025

**Responsible Artificial Intelligence governance in oncology**

Peter D. Stetson, January Choy, Natalia Summerville, Abigail Baldwin-Medsker, Janet Mak, Avijit Chatterjee, Kristen Kim, Chhavi Kumar, Patrick Samedy, Joanna Halperin, Louis Voigt, Justin Jee, Jill Fraser, MaryAnn Connor, Richard Harper, Rémy Evard & Anaeze C. Offodile 2nd

*npj Digital Medicine* **8**, Article number: 407 (2025) | Cite this article

**4272** Accesses | **17** Altmetric | Metrics

1 year ago: ~100 models
Currently: ~157 models

# Transitioning from Pilot to Enterprise Deployment

- Option A: **no pilots allowed** (only full-on ”initiatives”)

- Option B: If you must pilot, consider a “transition checklist” for repeatable **launch plan to achieve exit velocity** from the pilot
  - Note: RE-AIM and other health services models are probably too heavy weight – AI “half-life” is now ~6 months between breakthroughs

**Operationalization Check List for AI Tools**

[ ] On mission for the health system?
[ ] Clear path to financial and operational ROI?
[ ] Sponsor engaged?
[ ] Clinicians on board?
[ ] Model owner ready to support/adjust?
[ ] Pilot met exit criteria aka “Success Metrics”?
[ ] Does it change management?
    If prediction rule, is there a feasible action (does it change management?)
[ ] Training completed?
    including a “how to” on the new motion of being the human in the loop
[ ] Do’s and Don’ts comms published?
[ ] Post-launch Dashboards and MLOps plan ready?

# AI ROI Dimensions

## Financial ROI (Hard ROI)


Revenue Generation

Pop Health Incentives

Operational Efficiency

New Growth Opportunities

Total Cost of Ownership

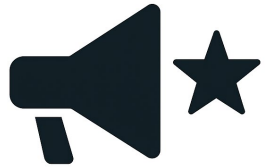
## Organizational ROI (Soft ROI)

Workforce Resilience

Clinical Outcomes & Quality Measures

Compliance & Risk Measures

Patient Satisfaction

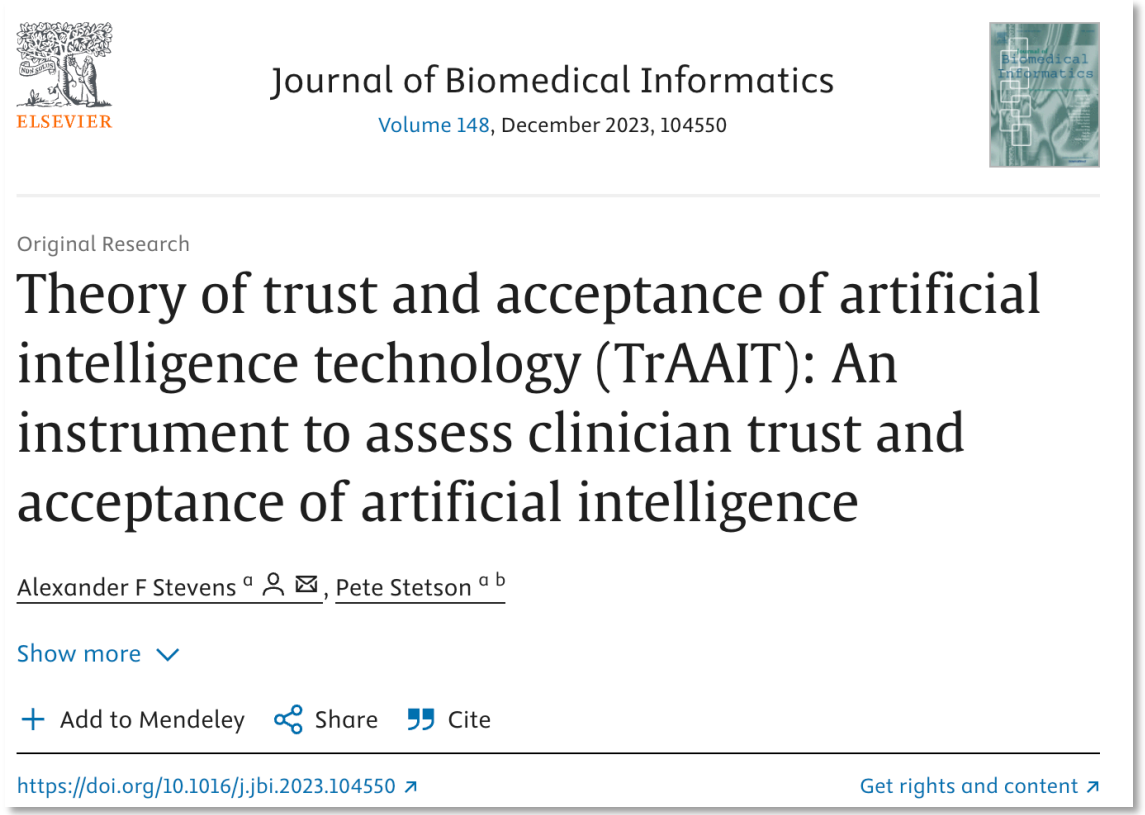


Brand & Reputation

Focus for 2026

# Addressing Clinician Trust

- Involve clinicians from inception (pre-contract)
- Set *a priori* success metrics
- Set *a priori* autonomy level (i.e. requires human in the loop?)
- Distinguish “features” vs. “advanced models and agents”
  - The latter needs tighter RAI governance
- *Consider measuring trust with a validated tool*



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Journal of Biomedical Informatics

Volume 148, December 2023, 104550

Original Research

Theory of trust and acceptance of artificial intelligence technology (TrAAIT): An instrument to assess clinician trust and acceptance of artificial intelligence

Alexander F Stevens [a], Pete Stetson [a b]

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https://doi.org/10.1016/j.jbi.2023.104550

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# Best-practices Oncology AI recommendations

1. Ensure RAI (responsible AI) lives somewhere in your governance structure; mature it (and plan for eventual senescence)
2. Ensure clinician participation in proactive trust-building
3. Create an “operationalization check list” for scaling AI initiatives
4. Bake estimated ROI into any business case, and ROI monitoring into any execution plan (including “algorithmo-vigilance”)
    1. Exception to this: If it is a simple feature of a platform with low risk