

MEMOTEXT PLAYBOOK FOR DIGITAL PATIENT ENGAGEMENT > PART I

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Therapeutics

Agenda

1 Welcome & Introductions

Amos Adler

Introductions and Agenda Overview

2 The AI Playbook for Digital Health Engagement Overview

What is MEMOTEXT?

What is the AI Playbook?

3 Case Study: AI in Action

Dr. Pedro Velmovitsky

KiT Overview and Brief Demo

4 Guest Speakers: AI & IRB Considerations in Research

Dr. Joseph Cafazzo & Mikayla Sonnenberg

Ethical & Regulatory Considerations / Informed Consent & Participant Protection / Data Privacy & Security / Bias, Fairness & Equity / Practical Challenges & Trends / Tips & Tricks

5 Key Takeaways & Q&A

MEMOTEXT

Trusted since 2012, MEMOTEXT® is a platform for co-creation of digital patient engagement and digital therapeutics.

↑ 31.4%
Med Adherence
JAMA Published

88%
Member
Retention

50+
Digital Patient
Engagement
Programs

3.2
Avg # days
patients refill early

50%
early treatment
discontinuation

+2hr/week
Time savings per
Case Manager



Toolkit and Marketplace

Create your solution or choose from our marketplace of validated solutions and digital therapeutics.

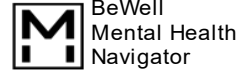
Try out the Toolkit



Visit the Marketplace



Vanderbilt Univ. Medical Center: Accessible SMS T2 Diabetes Wellness, Care Coord + Med Adherence



CAMH : Mental Health Engagement Enhancement & Navigation



CAMH-MEMOTEXT JV Digital Therapeutic App & Clinical Portal for **Severe Mental Illness (SMI)**



Peri-natal & early parenting SMS evidence-based education & support with Univ. of British Columbia



SE Health Aging at Home - Amazon Alexa & IVR Check-ins for Seniors - Call Center Escalations

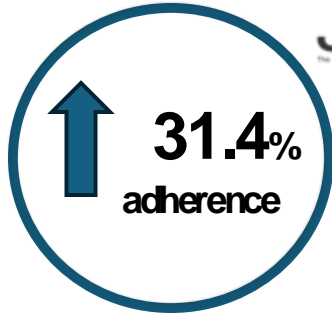


SMS Text Chatbot for Type1 Diabetes built with The Hospital for Sick Children (**SickKids Toronto**)



Clinically Validated

Improvement in patient adherence to medication therapy
Johns Hopkins University
Glaucoma randomized clinical trial

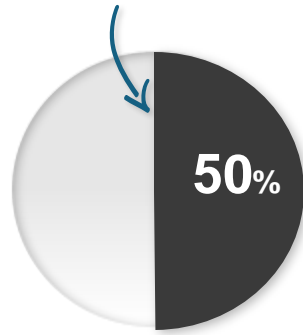


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Demonstrated ROI
Improvements in pharmaceutical adherence for manufacturers

+40000/day

PROACTIVE
COVID-19 SMS & IVR
Homecare & Schools

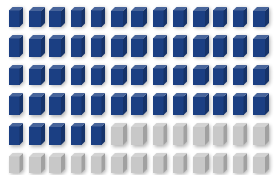


Reduction in treatment discontinuation

Statin and hypertension medication initiation with health insurer

80%

would recommend MEMOTEXT interventions to other patients



-2hrs/week

Reduction in Case Manager time Care Coordination



55%

Increase Medication Possession Ratio (MPR)
T2 Diabetes Monotherapy



Engagement on SMS Mental Health Check-ins for HCP*
*SMS sent through CalmDoc Program



Build your engagement intervention



Pick Communication Channel(s)

- Text Messaging
- WhatsApp
- Email
- Web/iOS/Android Notifications
- Web/Mobile app
- Voice

Connect Data

- Wearables
 - Claims
 - Surveys & CRM
 - Patient Facing Site/App
- fitbit

Configure Logic & Sequencing

Data Driven

Dynamic / Rules Based

Repeating

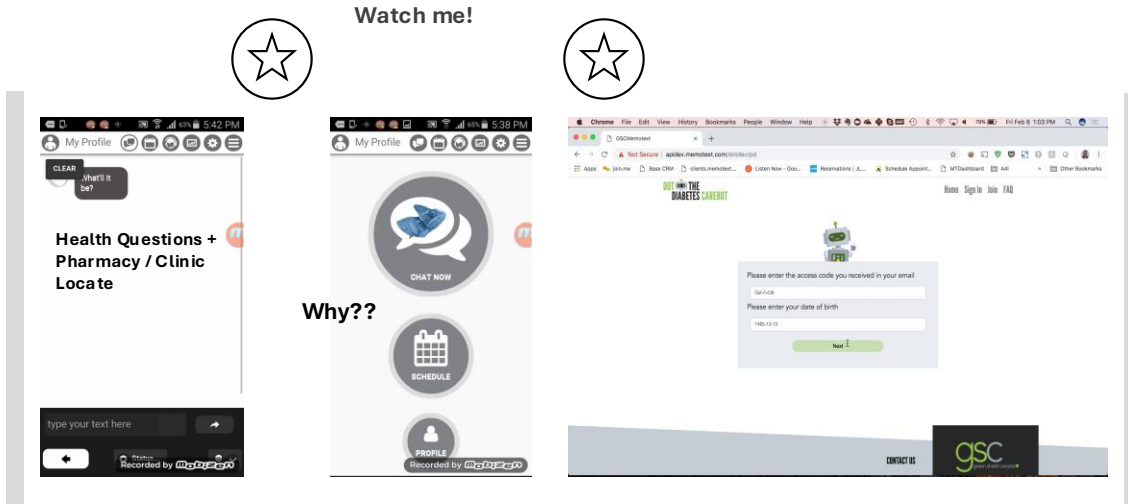
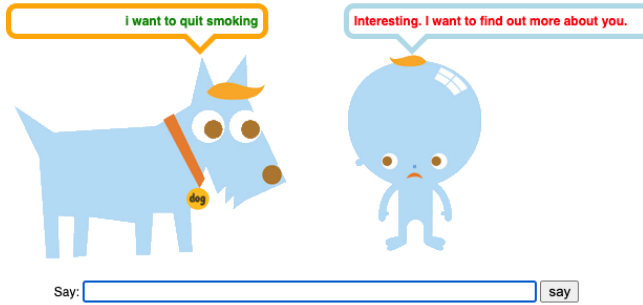
Conversational & Secure LLM

MEMOTEXT Response Parser (AE detection, ML flagged, human reviewed)



Health AI Engagement Since 2016

Evolution of Clinical Bots for Intake, Q&A, 2Way Engagement



AIML	Mobile + Facebook	Web Based	RASA & Python
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AIML JQuery

Engine based on AIML which MEMOTEXT modified

AIML from scratch

AIML in Mobile and Facebook

Javascript/JQuery

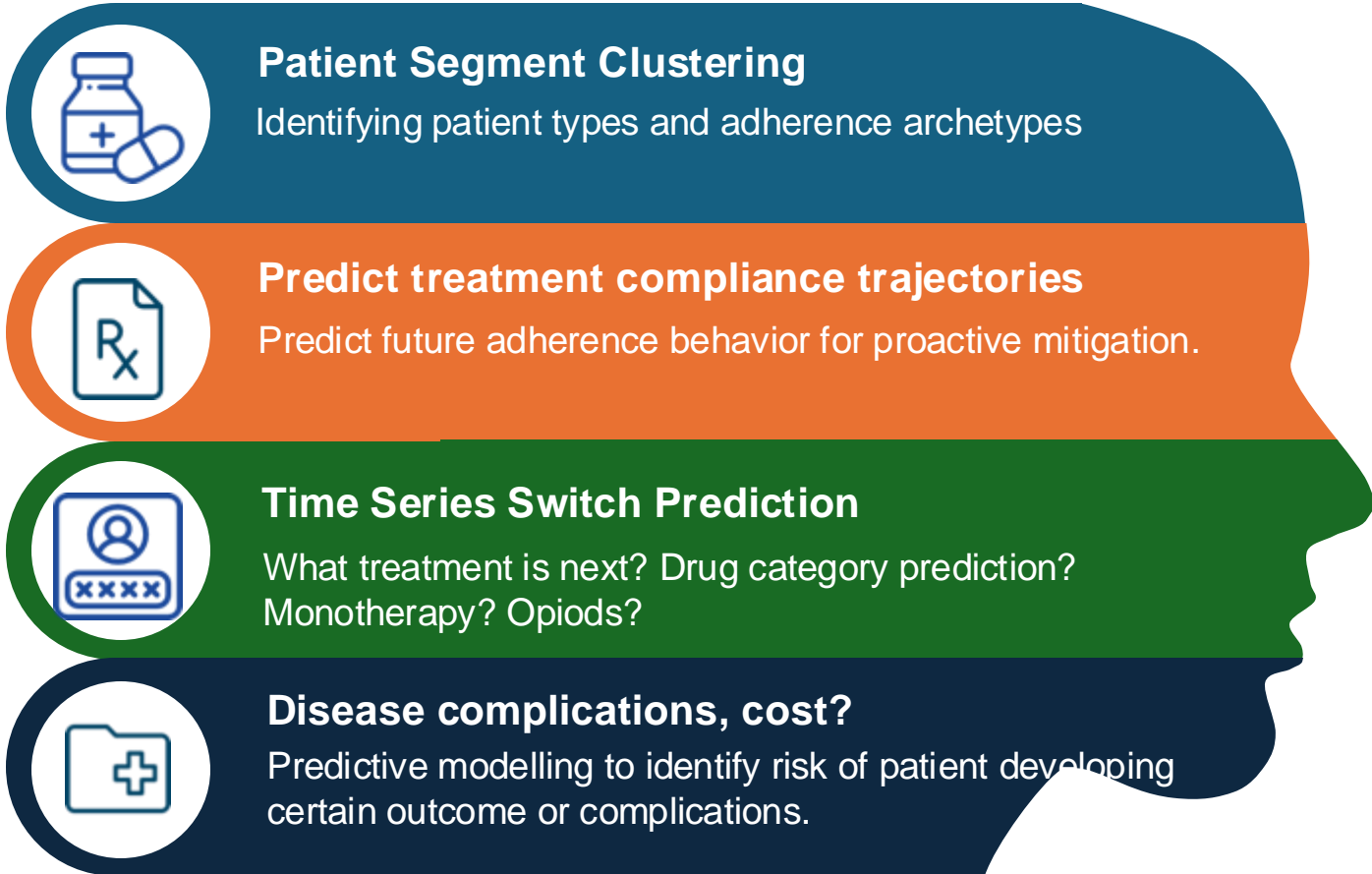
Fully Scripted Bot as Intake

Using Rasa X

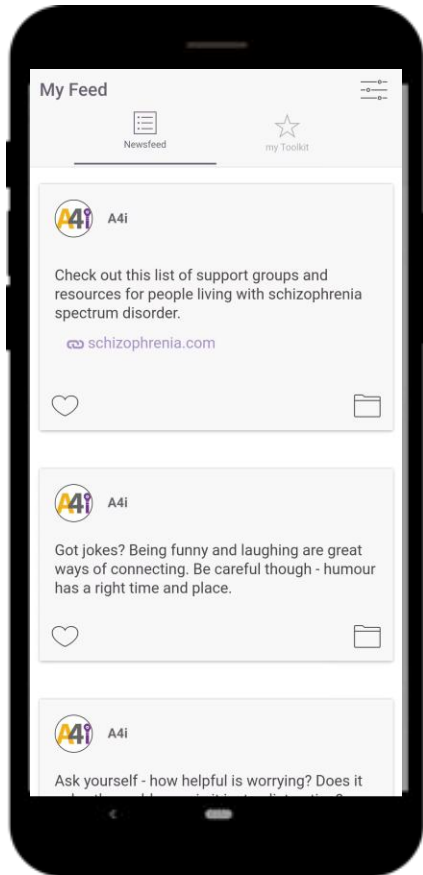
We can facilitate tool or consider building from scratch



AI/ML in patient engagement – Defining at-risk populations



NLP and LLM Risk Detection from Patient Generated Content



ORIGINAL TEXT FROM PATIENT	ACTION BY CASEMANAGER	REASONS FOR DECLINE	SENTIMENT (SCORE)	EMOTION (PROBABILITY)
I think the LA Sierra TANF office of Social Services is so full of it if they didn't want to help people and children they should have chosen a better job. What's crazy is you get a Hispanic worker racists against her own race. It's a SHAME	Declined Post	Negativity, Identifiable	Negative (-0.82)	Surprise (0.30), Anger (0.23)
I am so overwhelmed with my new diagnosis and change of medication. I am so anxious and uneasy . I can't seem to get out of this funk of being being numb .	Declined Post	Help	Negative (-0.74)	Fear (0.95) Joy (0.01)
I had a good time at the Angeles game last night, it was great for my mental health now I'm off to my DBT group everyone have a great day	Approved Post	NA	Positive (+0.90)	Joy (0.99) Sadness (0.00)
Wow its been a long week loving the new job having fun learning to show the compassion i have from within.	Approved Post	NA	Positive (+0.93)	Joy (0.99) Surprise (0.019)

Identifying Risk: Validating classification models to predict the sentiment, emotions of text data.



Regulatory Traceable Conversational Capabilities

LLM and Non-LLM

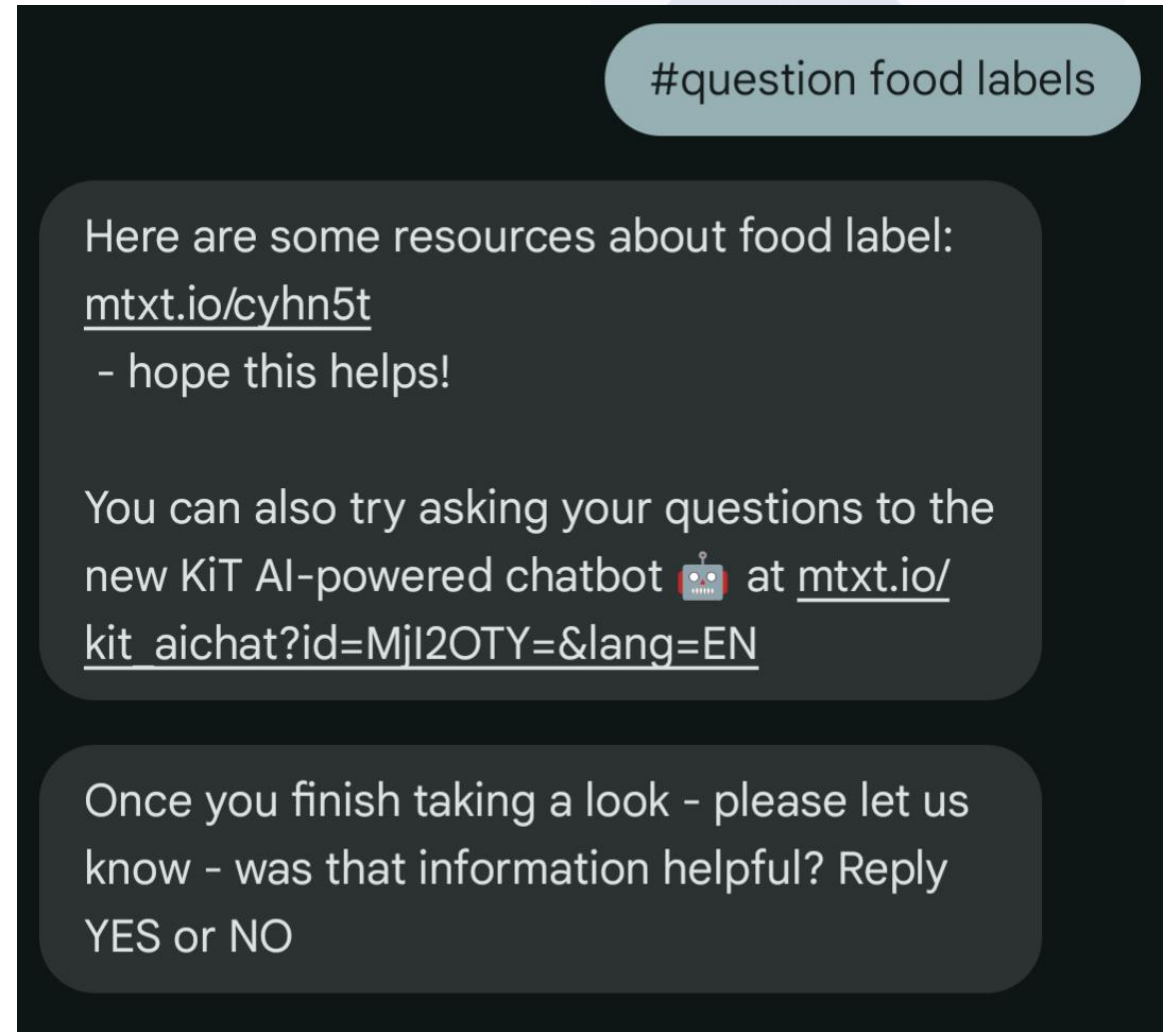
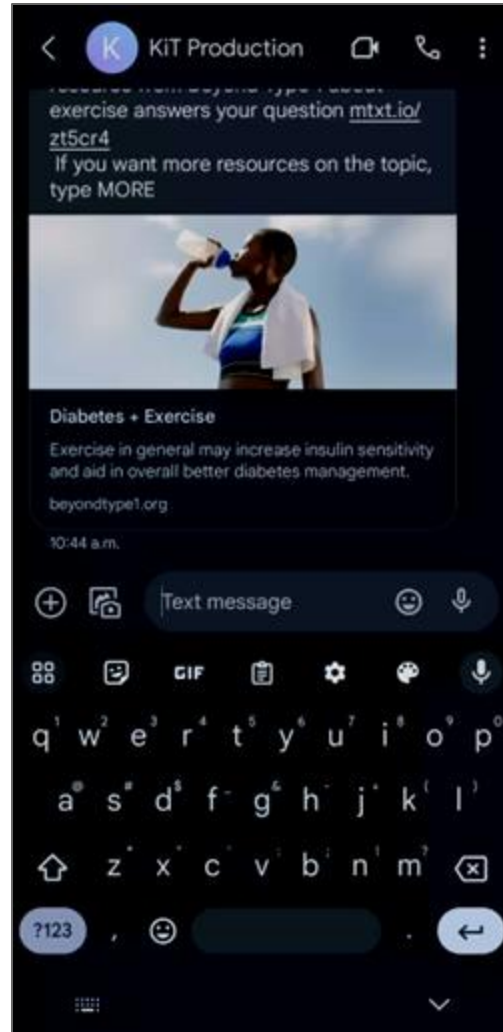


KiT - Keeping in Touch

Combined LLM & Non LLM

Care-Coordination via SMS conversational bot.

Care coordination and educational text messaging program for youth diabetes management.





SECURE HOSTED LLM Engagement

Care Coordination, Patient Support, Adherence



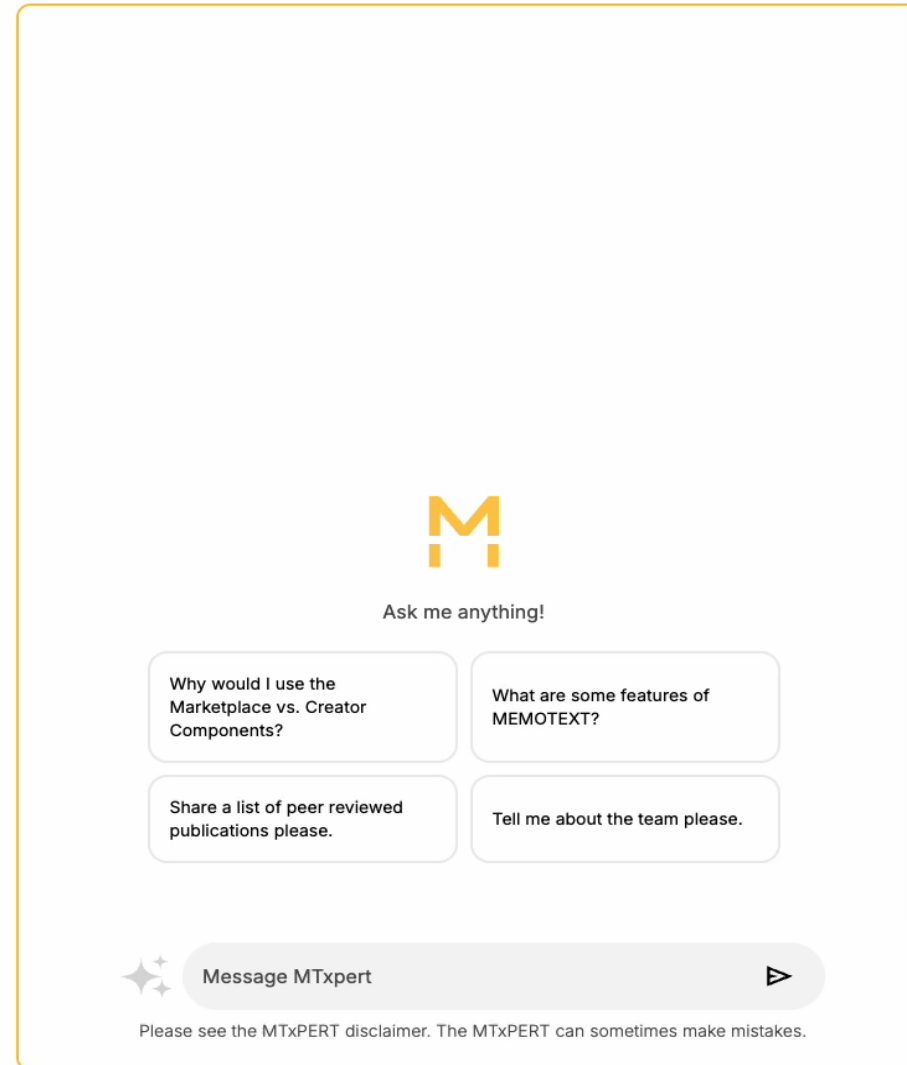
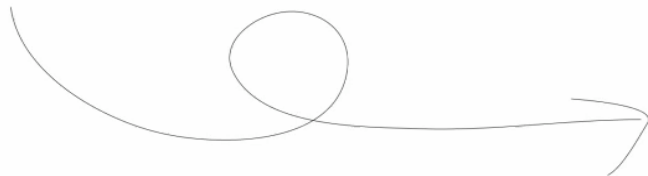
Digital Patient Engagement Starts Here

Create or implement digital patient engagement solutions. MEMOTEXT uses personalized, data-driven communications to boost treatment adherence and health outcomes for different health conditions and populations.

-  Browse our Marketplace
-  Create a Patient Engagement Solution

Not sure where to start? Chat with our MTxPERT.

By using this tool, you acknowledge that you have read and understand our [disclaimers](#).



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Ask me anything!

Why would I use the Marketplace vs. Creator Components?

What are some features of MEMOTEXT?

Share a list of peer reviewed publications please.

Tell me about the team please.

Message MTxpert

Please see the MTxPERT disclaimer. The MTxPERT can sometimes make mistakes.



PLAYBOOK

FOR DIGITAL PATIENT ENGAGEMENT > PART I

**“ You don’t know
what you don’t know. ”**



PLAYBOOK

FOR DIGITAL PATIENT ENGAGEMENT > PART I

“ ...healthcare risks adopting AI reactively, allowing vendors to dictate priorities rather than using AI as a tool for intentional, problem-driven innovation. ”



AI Playbook

AI adoption in healthcare is early but growing.



Problem Definition

Identify impactful use cases (personalized messaging, care coordination).

Governance Framework

Build trust with governance, compliance, and oversight.

Transparency, Safety

Implementation

Prioritize patient safety, transparency, and consent.

Best Practices

Use quality data for adaptive, bias-free AI systems.

KPIs / Reporting

Measure outcomes and refine through feedback.

Bias/Equity

Governance and trust are essential as AI evolves to improve patient care and outcomes.

Future Directions

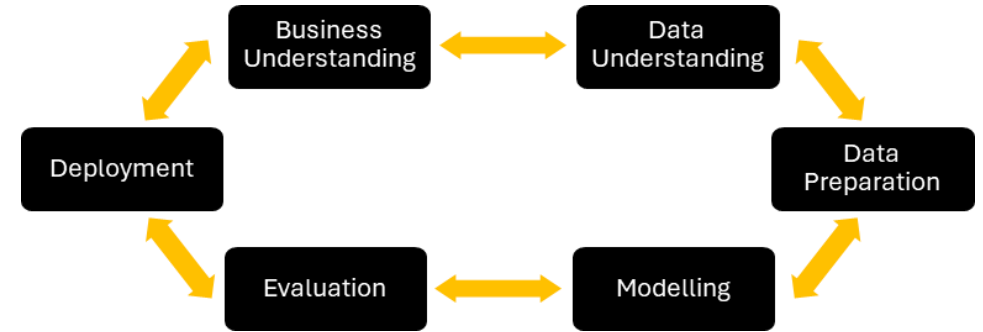


Playbook Overview

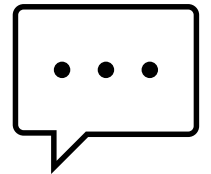


PART I

- 1 Problem Definition and Use Case Identification**
Defining a problem or identifying opportunities where AI adds value in messaging, conversational agents, micro randomization, inbound and outbound communications automation.
- 2 Building a Governance Framework**
Implementing governance models to ensure compliance, ethical use, patient safety and domain-specific area requirements i.e. pharmacovigilance.
- 3 Transparency, Patient Safety and Trust**
Ensuring AI is transparent, explainable, and always subject to human oversight.



- Problem Definition & Design thinking, CRISP DM and CATWOE/SSM Methodologies
- Use-cases: Operational (care coordination/cust svc) >> Clinical based on risk, liability
- Governance Requirements: Strategy, Security, Curation, Audit, Privacy, Ethics
- Transparency: Prescriptive vs. Augmentative >> Explainability (XAI) and RAGs





Playbook Overview

PART II

1 Implementing AI

Overview of some practical steps - data collection and cataloguing, model training, LLM tuning and bias mitigation. Whether in-house or with external vendors data strategy is material to the development and leveraging of internal data and policies, procedures and protocols.

2 Best Practices for AI Engagement

Leveraging AI to deliver timely, relevant, and personalized communications across multiple channels.

- Data Collection and Data Engineering (Pipeline set up, liquidity, storage, encryption, compliance)
- Best practices on Micro-Randomization, Just-In-Time-Adaptive-Interventions (JITAs), MultiChannel Modalities
- Case Studies in efficacy, integrations and best practices

Problem definition
High workload for clinicians and manual processes

Objective
Streamline clinical workflow with AI

Data Collection:
7000+ statements collections

Data Exploration
Conduct analysis to explore for AI solutions

Data Modelling
1. Risk and Sentiments
2. Coaching recommendations

Deployment
Integrate ML / LLM pipeline with feedback loop





Playbook Overview

PART III

- 1 Monitoring and KPIs**
Measuring engagement, outcomes, and patient safety, while continuously improving the AI system based on feedback.
- 2 Addressing Challenges: Bias, Transparency, Privacy**
Implementing governance models to ensure compliance, ethical use, patient safety and domain-specific area requirements i.e. pharmacovigilance.
- 3 Future Directions**
Exploring future AI innovations, agentic AI and trends that will shape healthcare engagement.

- Regulatory / Ethical Oversight
- Social Determinants of Health
- Complexity
- Interoperability
- The Patient's Role in their own health

**CHANGE IS
HAPPENING**

**BUT WHAT
WON'T
CHANGE?**



Thank you 🙏

Contact: amos@memotext.com

<https://memotext.com>

Get the Playbook:



<https://mtxt.io/ai1>



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