

AI 101: Using AI to Support Substance Use Prevention

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Prevention professionals face serious capacity constraints. Time, funding, and technical skills are always in short supply. Those constraints can limit your ability to provide effective services for your community. Artificial Intelligence (AI) offers an opportunity to do more with your available resources – to be a force multiplier for prevention. But before you can take advantage of AI, you need to understand what it is and how to use it effectively and ethically.

This factsheet provides a brief background on AI, offers a framework for deciding when and how to use AI, and explores specific AI applications with the context of SAMHSA's Strategic Prevention Framework (SPF).

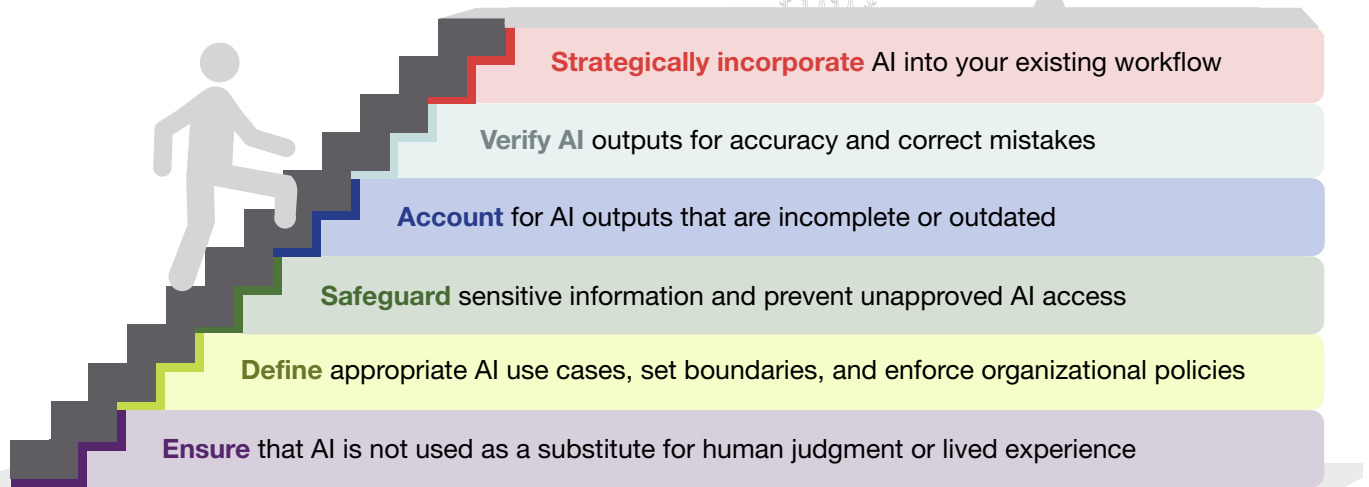
WHAT IS AI?

AI is a computer system capable of performing tasks that traditionally required human thought, such as generalization and decision-making. Generative AI (GenAI) is a subset of AI that can create new content.¹ Many GenAI systems are large language models (LLMs), which are trained on vast quantities of text to generate responses to human language. GenAI can quickly process large amounts of information to support human workflows.

GenAI exists as a standalone application (i.e., website chat interface or software) and as a feature integrated into other applications (e.g., email clients). Some of the most common GenAI consumer platforms are [Claude \(Anthropic\)](#), [Copilot \(Microsoft\)](#), [Gemini \(Google\)](#), [Meta AI](#), and [ChatGPT \(OpenAI\)](#).

ENSURING RESPONSIBLE AI USE

AI can be a powerful tool for prevention. But it is a tool like any other. You need to use it effectively and responsibly. GenAI responses sound authoritative, which can lead people to trust them unquestioningly. But GenAI can make mistakes, it can make things up (“fabrications”), and it can have predispositions or gaps stemming from its training data. Above all, AI cannot replace human accountability. Before using AI, decide how you will:



A FRAMEWORK FOR DECIDING WHEN AND HOW TO USE AI^{2,3}

Goal

Determine your goal before involving AI to stay focused on priorities

Example

I want to create a flyer to raise awareness of fetal alcohol spectrum disorders (FASD)

Gap

Assess your own capacity and the capacity of your AI

I have FASD expertise but lack design skills. AI can generate high-quality visuals quickly

Game

Map AI's strengths and weakness to your tasks to use it strategically

I can set goals and parameters and ask AI to help me develop content and layout options

Guardrail

Determine how you will check AI outputs and limit AI actions to ensure human accountability and ethical oversight

I must verify all FASD content and review layout for "human eyes"

USING AI IN PREVENTION

SPF Step	Planning Task Examples	Technical Task Examples
Needs Assessment	Help draft a data collection and analysis plan	Identify, catalog, and summarize publicly available secondary data
Capacity	Identify and catalog potential partners	Organize meeting minutes or community feedback
Planning	Suggest prevention initiatives to explore and stress-test ideas	Visualize completed logic models or action plans
Implementation	Draft prevention material content for human review	Format materials (e.g., flyers, social media posts, factsheets)
Evaluation	Propose performance objectives and measures	Assist with data cleaning and analysis

WHAT AI SHOULD NOT REPLACE

AI can do many things well. But there are essential aspects of prevention that AI should not replicate or replace:^{2,4}

Lived experience, community voice, and relationships

Professional judgment and accountability

Human connection and trust between community partners

Human oversight in clinical decision-making

Used carefully, AI can help you do more with what you have. But be sure to think through exactly when and how AI can help you. Remember not to place AI above community voices. And review [training materials](#) on how to prompt AI effectively.

NOTES

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