# AINGENS™
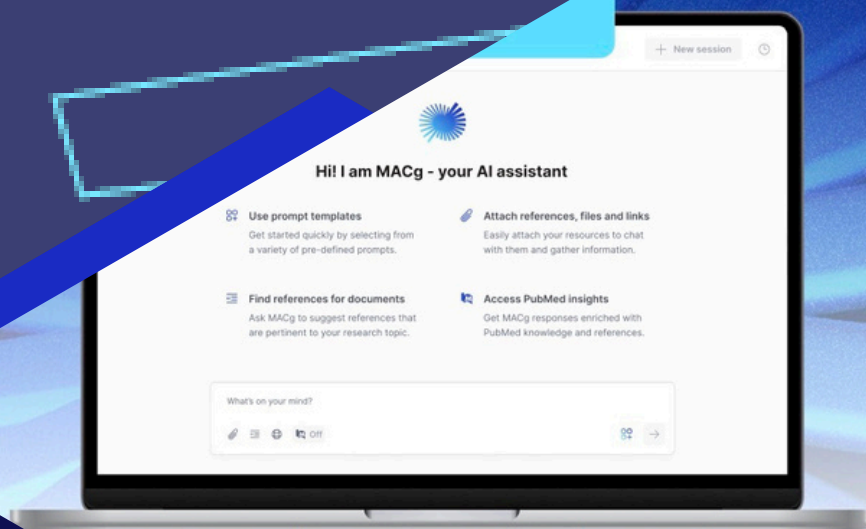AI Narrative Generation & Engagement Solutions

# AI PROMPT TEMPLATES

## for Healthcare Professionals, Researchers, Medical Affairs, and Students

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## Purpose

- Equip healthcare and science teams with ready-to-use, placeholder-based prompts for evidence searches, writing, visualization, education, and communications.
- Ensure clarity, consistency, and scientific rigor while speeding up output creation.

## How to Use This Document

### Step-by-Step Instructions

1. Choose a Category:
- PubMed searching, evidence synthesis, abstracts, blogs, FAQs, summaries, essays, targeted content, charts, or diagrams.
2. Fill Placeholders:
- Replace every bracketed field exactly once (e.g., [condition] → type 2 diabetes). Do not leave brackets in your final prompt.
3. Specify Constraints:
- Add [word count], [timeframe], [region], [audience], [reading level], [output format], and any custom requirements.
4. Enable Tools and Attach Data:
- For literature-backed content, enable PubMed Search and/or Web Search.
- For charts/diagrams, paste your dataset or specify sections.
5. Request Output Structure:
- Ask for bullets first, then a table, then key takeaways. Keep it scannable.
6. Iterate:
- Refine by requesting shorter/longer output, added limitations, subgroup results, safety highlights, or compliance notes.

## Recommended Defaults (Add to Your Prompts)

- Evidence: Use PICO; include study design, N, effect sizes, CIs, p-values, follow-up, and adverse events.
- Safety/Ethics: Include contraindications, monitoring, and special populations; educational, non-prescriptive tone.
- Formatting: Bullets + table + key takeaways; region/timeframe; audience level (expert/clinician/trainee/patient).

| Placeholder | Description |
|---|---|
| [population] | Target group (e.g., adults with BMI ≥30) |
| [condition] | Disease/condition (e.g., T2D) |
| [intervention] | Treatment/exposure/intervention |
| [comparator] | Control or alternative |
| [outcome] | Primary outcome/endpoint |
| [timeframe] | Years or follow-up window |
| [region] | Geography (US/EU/Global) |
| [test/modality] | Diagnostic/assessment tool |
| [biomarker/pathway/factor] | Mechanistic element |
| [therapy/treatment] | Drug/device/therapy |
| [special population] | E.g., CKD, pregnancy, pediatrics |
| [data source] | Dataset/registry/claims |
| [endpoint] | Primary/secondary endpoint |
| [word count] | Target length |
| [audience] | HCPs, trainees, executives, patients |

| Placeholder | Description |
|---|---|
| [topic/study/topic] | Content subject |
| [metric/categories/units] | Chart-specific fields |
| [field/industry/area/context] | Domain for writing |
| [technology/innovation/tool] | Tech or platform |
| [event or process] | Process to explain |
| [product or service] | Asset to cover |
| [reading level/age group/skill level] | Clarity settings |
| [interest or focus] | Newsletter/social theme |
| [cause or event/learning style] | Campaign/workshop focus |

# PubMed Searching (Turn PubMed Search ON)

1. **Instruction:** Search PubMed for recent evidence on [population] with [condition] receiving [intervention] versus [comparator] focused on [outcome] within [timeframe]. Extract study design, N, effect sizes, confidence intervals, p-values, follow-up, and safety. Summarize by highest evidence first.
2. **Instruction:** Use PubMed to identify RCTs and meta-analyses on the effectiveness and safety of [therapy] for [condition]. Create a synthesis table with study type, N, endpoints, effect estimate, CI, p-value, key adverse events, and subgroup insights.
3. **Instruction:** Find PubMed articles on the impact of [lifestyle or environmental factor] on [clinical outcome] in [population]. Provide a clinician plain-language summary and a technical summary with effect sizes.
4. **Instruction:** Search PubMed for the role of [biomarker/pathway/factor] in [disease/condition]. Summarize mechanistic insights, translational relevance, companion diagnostics, and therapeutic implications.
5. **Instruction:** Use PubMed to compare [intervention A] versus [intervention B] in [condition]. Extract head-to-head trials and high-quality indirect comparisons; note heterogeneity and certainty; provide a verdict with confidence level.
6. **Instruction:** Search PubMed for data on [treatment] in [special population]. Summarize dosing, PK/PD, safety signals, and guideline notes.
7. **Instruction:** Find PubMed studies on the diagnostic accuracy of [test/modality] for [condition]. Report sensitivity, specificity, PPV/NPV, AUROC, reference standard, and pretest probability context.
8. **Instruction:** Use PubMed to identify cost-effectiveness and real-world outcomes for [intervention] in [condition]. Extract ICER, QALY, perspective, and generalizability.
9. **Instruction:** Search PubMed for guideline summaries and consensus statements for [condition] in [region]. Compare key recommendations and evidence levels.
10. **Instruction:** Synthesize adverse event profiles for [therapy], including dose modifications, monitoring parameters, and management algorithms. Provide a clinician checklist.

# Writing Blogs and Clinician Articles

1. **Instruction:** Write a clinician-facing overview on the impact of [technology/innovation] on [clinical area] for [audience]. Include 3 brief case vignettes, benefits/risks, and a practical checklist.
2. **Instruction:** Draft a general-audience blog on the benefits of [diet or lifestyle] for [health aspect]. Use clear language, evidence highlights, and safety caveats for [special population].
3. **Instruction:** Create a blog post on the latest trends in [field/industry] within [timeframe]. Provide 5 key trends, examples, and implications for [audience].
4. **Instruction:** Write a blog about the impact of [technology/innovation] on [area]. Provide 3 examples and 3 practical takeaways for [audience].
5. **Instruction:** Create a blog discussing the role of [concept/tool] in [context]. Use an engaging style and end with a 5-point summary.

# Abstracts (Journal/Conference)

1. **Instruction:** Draft a structured abstract (Background, Methods, Results, Conclusions) for a study on the effects of [factor] on [outcome] in [population]. Include N, endpoints, effect sizes, CIs/p-values, and key safety findings. Limit to [word count].
2. **Instruction:** Create an abstract for research on the impact of [intervention] on [condition]. Provide study design, primary/secondary outcomes, and limitations. Limit to [word count].
3. **Instruction:** Write an abstract on the role of [element] in [process]. Summarize methods, key findings, and implications. Limit to [word count].
4. **Instruction:** Draft a conference abstract for [technology] in [application], including endpoints, subgroup results, and adverse events. Limit to [word count].

# Evidence Synthesis and Appraisal

1. **Instruction:** Summarize evidence for [intervention] in [condition] using PICO. Rate certainty using GRADE-like language (high/moderate/low/very low) with rationale across risk of bias, inconsistency, indirectness, imprecision, and publication bias.
2. **Instruction:** Build a risk of bias matrix for studies on [topic] across domains: randomization, allocation concealment, blinding, incomplete outcome data, selective reporting, and other biases. Provide a 1-2 line justification per domain.
3. **Instruction:** For [intervention] in [population], list pre-specified subgroups, report heterogeneity, and summarize credible subgroup effects. Propose sensitivity analyses and interpret robustness.
4. **Instruction:** Translate findings for [intervention] in [condition] into clinical applicability: inclusion/exclusion vs typical clinic patients, setting, monitoring needs, barriers, and shared decision points.

# Medical Affairs and Field Medical

1. **Instruction:** Produce a one-page medical affairs brief on [asset/therapy] for [indication] covering MoA, pivotal data, safety, target patients, positioning vs standard of care, ongoing trials, and objection handling. Word limit: [word count].
2. **Instruction:** Create a KOL engagement plan [topic] with objectives, priority questions, compliant discussion points, and evidence artifacts for sharing. Audience: [audience]. Timeframe: [timeframe].
3. **Instruction:** Write FAQs for [product/therapy] targeting [audience]. Include MoA, efficacy highlights, key safety warnings, drug-drug interactions, storage/handling, and monitoring.

# Patient and Caregiver Materials

1. **Instruction:** Draft a patient-facing handout on [condition/therapy] at a [specific reading level] reading level. Include what it is, benefits, risks, how to take/use, when to call the clinic, and shared decision prompts. Add a clinician-only note with monitoring tips for [audience].

# Real-World Evidence and HEOR

1. **Instruction:** Draft a concept sheet for an RWE study on [intervention] in [population] using [data source]. Define cohort criteria, index date, outcomes, covariates, confounding control plan, and sensitivity analyses.
2. **Instruction:** Create a concise HEOR snapshot for of illness, clinical value, economic outcomes (ICER/QALYs), budget impact considerations, and unmet need. Audience: [audience].

# Statistics, Methods, and Protocol Support

1. **Instruction:** Convert this research idea into a structured PICOT with inclusion/exclusion and primary/secondary endpoints: [research idea]. Provide 2-3 alternative PICOTs with trade-offs.
2. **Instruction:** Outline an initial sample size rationale for [endpoint] in [population] comparing [arm A] vs [arm B], specifying assumed effect size, variance, alpha, power, and attrition. Flag assumptions needing verification.
3. **Instruction:** For [observational question], list likely confounders, selection and measurement biases, and mitigation strategies (propensity scores, IVs, negative controls, sensitivity analyses).

# FAQs (All Audiences and Topics)

1. **Instruction:** Write FAQs for [specific audience] about [specific issue]. Provide detailed, evidence-aware answers with practical steps, risks, and when-to-refer guidance. Include a quick-reference table and 3 key takeaways.
2. **Instruction:** Create FAQs for [specific event or process]. Ensure questions cover who/what/when/where/how, prerequisites, timelines, documentation, and escalation paths. Provide a final checklist.
3. **Instruction:** Write a set of FAQs about [specific technology or tool] for [specific audience]. Explain core concepts, use cases, limitations, data/privacy considerations, and troubleshooting examples.
4. **Instruction:** Develop FAQs for [specific industry or sector] clarifying key terms, regulatory context, quality/safety standards, and common pitfalls. Include a "Do/Don't" list.
5. **Instruction:** Create FAQs for [specific audience] about [specific product or service]. Include indications/uses, benefits, limitations, safety/contraindications, handling/storage, and support channels.
6. **Instruction:** Write a list of FAQs about [specific health condition or treatment] for [specific audience]. Cover diagnosis basics, first-line options, monitoring, adverse events, red flags, and referral criteria.
7. **Instruction:** Create FAQs for [specific educational topic]. Ensure the questions and answers are suitable for [specific educational level], with definitions, examples, and a short self-check quiz.
8. **Instruction:** Develop a set of FAQs about [specific policy or regulation]. Clarify scope, applicability, steps to comply, documentation, timelines, and penalties. Include real-world scenarios.

# Article Summaries

1. **Instruction:** Summarize an article on the benefits of [specific topic] for [specific audience]. Provide a concise synopsis, key data points, limitations, and 3 actionable takeaways. Length: [word count].
2. **Instruction:** Create a summary of an article on the importance of [specific issue]. Use positive, clear language; include context, main findings, implications, and next steps for [specific audience]. Output: [bullets/table].
3. **Instruction:** Summarize an article on the latest trends in [specific field]. List top 5 trends, illustrative examples, and projected impact on [specific area]. Time horizon: [timeframe].
4. **Instruction:** Summarize an article on the impact of [specific technology or innovation] on [specific area]. Provide 2-3 examples, benefits/risks, and adoption barriers. Setting: [clinical/research/operations].
5. **Instruction:** Create a summary of an article on the role of [specific concept or tool] in [specific context]. Explain the mechanism/logic, evidence strength, and practical application steps. Output: [bullets + mini-table].
6. **Instruction:** Summarize an article on the challenges and opportunities in [specific industry or sector]. Provide a balanced view with mitigation strategies and success metrics. Region: [region].
7. **Instruction:** Create a summary of an article on the future of [specific technology or trend]. Provide near-term and long-term predictions, dependency risks, and milestones. Horizon: [1-2/3-5/5-10 years].
8. **Instruction:** Summarize an article on the significance of [specific event or milestone] in [specific field]. Include historical context, what changed, and implications for practice/policy. Length: [word count].
9. **Instruction:** Create a summary of an article on the environmental impact of [specific industry or practice]. Describe key impacts, mitigation options, and measurable actions. Output: [checklist/table].
10. **Instruction: Summarize an article on the role of [specific factor] in shaping [specific trend or development]. Provide mechanisms, evidence strength, and 3 practical implications. Level: [expert/clinician/lay].**

# Writing Essays

1. **Instruction:** Write a detailed essay on the impact of [specific issue] on [specific area] for [specific audience]. Cover background, mechanisms/drivers, evidence, implications, and recommendations. Length: [word count].
2. **Instruction:** Create an essay on the role of [specific factor] in [specific context]. Include definitions, supporting evidence, counterarguments, and future directions. Length: [word count].
3. **Instruction:** Write an essay on the benefits of [specific practice or innovation] with real-world examples, limitations, and implementation considerations. Audience: [specific audience].
4. **Instruction:** Write an essay on the importance of [specific topic] with illustrative cases and measurable outcomes for [specific audience]. Length: [word count].
5. **Instruction:** Create an essay on the impact of [specific trend or development] on [specific area]. Analyze stakeholders, economics, ethics, equity, and scalability. Timeframe: [timeframe].
6. **Instruction:** Write an essay on the challenges and opportunities in [specific industry or sector]. Provide SWOT-style analysis and strategic recommendations. Output: [table + narrative].
7. **Instruction:** Create an essay on the future of [specific technology or trend] with scenario analysis (optimistic, base case, conservative) and trigger indicators. Horizon: [years].
8. **Instruction:** Write an essay on the significance of [specific event or milestone] in [specific field], including context, inflection points, and downstream effects. Region: [region].
9. **Instruction:** Create an essay on the environmental impact of [specific industry or practice], with lifecycle considerations and policy levers. Output: [action plan + KPIs].
10. **Instruction:** Write an essay on the role of [specific factor] in shaping [specific trend or development]. Contrast competing theories and synthesize a balanced view. Tone: [neutral/analytical].

# General Prompts for Targeting Content

1. **Instruction:** Write content about [specific topic] targeted at [specific audience]. Ensure the language matches [specific reading level] and include an executive summary and key takeaways. Length: [word count].
2. **Instruction:** Create a presentation on [specific subject] for [specific audience]. Propose [slide count] slides with titles, 3-5 bullets each, and suggested visuals for [specific age group].
3. **Instruction:** Develop educational material on [specific topic] for [specific educational level]. Include learning objectives, core content, a short quiz, and an answer key. Format: [handout/deck/one-pager].
4. **Instruction:** Write a report on [specific issue] for [specific audience] considering [specific context]. Include background, analysis, recommendations, and an implementation roadmap. Length: [word count].
5. **Instruction:** Create a guide on [specific process or task] for [specific audience]. Provide step-by-step instructions, prerequisites, common errors, and troubleshooting. Output: [checklist + flow].
6. **Instruction:** Develop a training module on [specific skill or topic] for [specific audience] at [specific skill level]. Include objectives, modules, exercises, and assessments. Duration: [minutes/hours].
7. **Instruction:** Create marketing content for [specific product or service] targeted at [specific demographic]. Use compliant, persuasive language, clear value propositions, and a call to action. Channel: [email/web/social].
8. **Instruction:** Write a newsletter on [specific topic] for [specific audience] focusing on [specific interest or focus]. Include 3-5 short items and a featured insight. Cadence: [weekly/monthly].
9. **Instruction:** Create a social media campaign for [specific cause or event] targeted at [specific audience]. Provide 5-7 posts with hooks, captions, and visual suggestions. Platforms: [LinkedIn/Twitter/etc.].
10. **Instruction:** Develop a workshop on [specific topic] for [specific audience] tailored to [specific learning style]. Include the agenda, activities, materials, and evaluation method. Duration: [minutes/hours].

# Chart Creation Prompts

**Important:**

- **Supported chart types: bar, line, pie, doughnut, radar, polar area, and bubble. Avoid area charts. Provide data as [dataset/table].**

1. **Instruction:** Create a bar chart to visualize the average growth rate of [specific plant species] under different [light conditions]. Label each bar; units: [units]. Data: [dataset/table].
2. **Instruction:** Generate a line chart showing the trend of [specific biomarker] levels over [specific time frame] during treatment. X-axis=time [units]; Y-axis=biomarker [units]. Data: [dataset/table].
3. **Instruction:** Create a pie chart illustrating the distribution of [specific cell types] in a tissue sample. Label segments and show percentages. Data: [dataset/table].
4. **Instruction:** Develop a doughnut chart comparing the proportion of [specific genetic variants] in a population study. Include percentage labels. Data: [dataset/table].
5. **Instruction:** Create a radar chart to display expression levels of [specific genes] across [tissue types]. Label each axis; ensure consistent scales. Data: [dataset/table].
6. **Instruction:** Generate a polar area chart representing the frequency of [specific behavioral events]. Use distinct colors; label segments. Data: [dataset/table].
7. **Instruction:** Create a bubble chart to visualize the relationship between [specific physiological parameters]. X=[parameter X units], Y=[parameter Y units], Size=[specific metric for bubble size]. Data: [dataset/table].
8. **Instruction:** Develop a stacked bar chart to show the composition of [specific microbial communities] across samples/groups. Include legend and percentage stacking. Data: [dataset/table].
9. **Instruction:** Create a bubble chart to analyze the correlation between [specific health indicators] in a cohort study. Label axes with units; include group legend. Data: [dataset/table].
10. **Instruction:** Generate a histogram to display the distribution of [specific blood test results] in a patient population. Set appropriate bin sizes; label axes with units. Data: [dataset/table].

# Diagram Creation Prompts

Notes:
- For clinical flowcharts, use a clear, deterministic sequence.
- For data models, include entities/classes, attributes, and relationships.
- Provide necessary context and scope to avoid ambiguity.

1. **Instruction:** Create a flowchart to illustrate the process of [specific metabolic pathway]. Include all major steps, enzymes, and intermediates. Format: [linear/circular].
2. **Instruction:** Develop a sequence diagram to represent interactions between [specific proteins or molecules] in [specific cellular process]. Label each interaction; ensure event order is clear. Level: [detailed/overview].
3. **Instruction:** Create a class diagram for [specific biological database]. Include classes, attributes, methods, and relationships. Format: [UML].
4. **Instruction:** Generate a state diagram to depict the states and transitions of [specific cellular state or condition]. Label states, transitions, and conditions. Context: [e.g., cell cycle].
5. **Instruction:** Create an entity-relationship diagram to model the data structure of [specific genomic database]. Include entities, attributes, primary keys, and relationships. Notation: [Chen/IE].
6. **Instruction:** Develop a user journey map to visualize the experience of [specific patient group] interacting with [specific healthcare service]. Highlight touchpoints, emotions, and pain points. Format: [timeline/flow].
7. **Instruction:** Create a Gantt chart to plan the timeline of [specific clinical trial]. Include major tasks, milestones, dependencies, and durations. Timeframe: [start-end dates].
8. **Instruction:** Generate a mind map to brainstorm ideas related to [specific research question]. Organize ideas into categories and subcategories. Audience: [research team].
9. **Instruction:** Create a network diagram to illustrate the connections between [specific neural networks or pathways] in [specific organism]. Label nodes, edges, and directionality if applicable. Format: [graphical].
10. **Instruction:** Develop a Sankey diagram to represent the flow of [specific nutrients or metabolites] in [specific biological system]. Vary widths to indicate flow magnitude and label each path. Context: [metabolic system].

# Quick-Fill Examples

| Category | Example Filled Prompt |
|---|---|
| PubMed | Search PubMed for recent evidence on [adults with T2D] receiving [semaglutide] versus [liraglutide] focused on [HbA1c change at 26 weeks] within [2020-2025]. Extract study design, N, effect sizes, CIs, p-values, follow-up, and safety. Summarize by highest evidence first. |
| Abstract | Draft a structured abstract for a study on the effects of [IL-23 inhibition] on [PASI-90 at 16 weeks] in [adults with moderate-to-severe psoriasis]. Include N, endpoints, effect sizes, CIs, p-values, and key safety findings. Limit to [250 words]. |
| FAQ | Write FAQs for [oncology fellows] about [immune-related adverse events]. Provide detailed, evidence-aware answers with practical steps, risks, and when-to-refer guidance. Include a quick-reference table and 3 key takeaways. |
| Chart | Generate a line chart showing the trend of [CRP] levels over [12 weeks] during treatment. X-axis=time [weeks], Y-axis=CRP [mg/L]. Data: [dataset/table]. |
| Diagram | Create a flowchart to illustrate the process of [glycolysis]. Include all major steps, enzymes, and intermediates. Format: [linear]. |

# Final Tips

- Always specify [audience], [timeframe], and [region] when evidence or guidance varies by geography or era.
- Ask for "bullets + table + key takeaways" for fast consumption in clinical and medical affairs settings.
- For verifiable outputs, enable PubMed/Web toggles and, when possible, attach PDFs or data tables.
- For visuals, paste datasets or section lists to ensure accurate charts/diagrams.