Surgical Collaboration Protocols: Structured Question and Proposed Approach

Comprehensive Question

You are a Lead Surgeon coordinating care for both moderate and high-complexity surgical cases involving multiple medical specialists (e.g., anesthesiology, radiology, internal medicine, ICU, social work). To ensure effective collaboration, shared accountability, and patient safety, you are designing a standardized collaboration protocol for your multidisciplinary team.

Please describe:

1. **Collaboration Protocol (Moderate Complexity)**
   - What is the most effective method for specialists to communicate their input in moderate-complexity cases?
   - Should discussions follow a structured round-robin, simultaneous opinion sharing, or a different format?
   - How can the process ensure inclusion, efficiency, and clarity in planning?
2. **Consensus Building**
   - When there is disagreement, how should the team reach a consensus?
   - Evaluate the merits and drawbacks of majority voting, weighted voting (based on domain relevance), or the lead surgeon making the final decision after discussion.
3. **High-Complexity Interdisciplinary Case Teams (ICT)**
   - What additional collaboration structures are needed for high-stakes cases (e.g., multi-visceral surgeries, ICU patients, ECMO)?
   - Should each team produce formal reports?
   - Should cross-team access to discussions and decision logs be allowed?
   - How should rapid-response or floating decision teams (FRDT) integrate into this setup?
4. **Innovative or Additional Measures**
   - Suggest any extra protocols, tools, or safeguards (e.g., dashboards, communication coaches, simulations) that could enhance collaboration, information flow, and decision-making under time or risk pressure.

Your response should reflect best practices in surgical leadership, interdisciplinary collaboration, and risk mitigation. Include reasoning behind your chosen approach.

1 Collaboration Protocol for Moderate-Complexity Cases

Step	What Happens	Why it Works
1. Silent Pre-Round Input	Each invited specialist submits a short SBAR-style note or 2-min voice clip *before* the meeting.	Prevents anchoring; gives quieter voices equal footing.
2. Structured Round-Robin	Moderator calls on each discipline in fixed order: diagnostics → subspecialties → periop → rehab/social work → nursing. No interruptions.	Ensures every domain is heard; keeps meeting $<$ 30 min.
3. Open Discussion	Free exchange of clarifying questions, risk–benefit weighing, contingency planning.	Builds a shared mental model.
4. Summarize & Document	Moderator reads back the agreed problem list, plan, and task owners; note auto-pushes to the EMR.	Creates an auditable trail; stops "I thought you were doing that" errors.

Why not unstructured sharing? Unstructured rounds invite dominance bias and often balloon to 45 min; the format above protects time without sacrificing input quality.

2 Consensus-Building Method

Delphi-Lite to Single-Point Decision

1. If a single plan is obvious after discussion, document it and proceed.
2. Otherwise run one private Delphi vote (chat/poll). Reveal results simultaneously; allow a *2-min* re-discussion of outliers only.
3. The lead surgeon then issues the final decision, recording the rationale (including minority views) and assuming accountability.

Why not pure voting? Majority or weighted voting can silence the one dissenting voice that spots a catastrophic risk. The hybrid captures group wisdom yet keeps responsibility clear.

3 High-Complexity / ICT Cases

Element	Recommendation
Formal reports	Each subspecialty produces a concise ($\leq$1 page) "Consult Conclusion" covering: problem, key data, risk matrix, preferred and fallback plans.
Cross-team communication	Mandatory joint case conference (virtual or in-person) with shared PACS view, whiteboard, and decision log.
Knowledge access (FRDT)	Provide full read-only access to all previous notes, chat threads, and imaging.
24-h Red-Team review	For ultra-high-risk cases, schedule an independent senior reviewer to audit the plan.
After-action debrief	Ten-minute debrief within 48 h; feed lessons into protocol updates.

4 Extra Ideas That Boost Collaboration

- **Shared visual dashboard**: live vitals, labs, imaging, and task ownership.
- **Psychological-safety check-in**: ask "Does anyone have concerns we haven't voiced?" before sign-off.
- **Communication coach**: rotate a trained nurse/fellow to monitor closed-loop communication.
- **Simulation for new pathways**: tabletop drills when a novel device or protocol is introduced.

Bottom Line

- *Moderate-complexity*: Structured round-robin with silent pre-input; quick Delphi pulse if needed; lead surgeon signs off.
- *Consensus*: Lead surgeon decides after documented multidisciplinary input; minority opinions recorded.
- *High-complexity*: Formal subspecialty reports + joint conference, full transparency for rapid-response teams, and an after-action loop.