The Value of Infectious Diseases Specialists

How Infectious Diseases Specialty Care is Associated With Better Patient Outcomes and Lower Costs
Who are ID Specialists and What Do They Do?

An Infectious Diseases (ID) Specialist is a doctor who is a qualified expert in the diagnosis and treatment of diseases caused by microorganisms. In addition to medical school and training in internal medicine, ID Specialists complete two to three years of additional residency training in Infectious Diseases.

ID Specialists often work alongside general internists and other medical and surgical specialists — lending their expertise to the treatment of infections that occur in major organ systems, (i.e. cardiovascular, CNS, circulatory, etc.). Their extensive training in infections caused by bacteria, viruses, fungi and parasites prepares them to be “medical detectives,” solving complicated cases by identifying the causes of infection and the most effective treatments.
ID Specialists Add Value and Contribute to Achieving “The Triple Aim”

“The Triple Aim”* has as its central tenants improving the individual experience of care, improving the health of populations and reducing the per capita costs of care for populations. Research shows that ID specialty care generates significant value for the healthcare system, while improving patient outcomes, thereby improving the individual experience of healthcare.

* The Triple Aim is a framework developed by the Institute for Healthcare Improvement that describes an approach to optimizing health system performance.
Having an ID Specialist involved in the care of a patient who has a severe infection will lead to better outcomes.

A recent study*, which analyzed Medicare data from more than 130,000 patient cases, found that ID Specialist involvement was associated with improved patient outcomes. Specifically, patients with severe infection, who had an ID consult during their inpatient stay, had better outcomes with respect to length of stay (overall LOS and ICU LOS), inpatient mortality, 30-day mortality, and 30-day readmissions.

Furthermore, the study compared patients who had an ID consult occur within the first two days of admission with patients who had an ID consult on the third day or later of their inpatient stay. The patients who had the earlier ID consult fared better in terms of length of stay (overall LOS and ICU LOS), inpatient mortality, 30-day mortality, 30-day readmissions, and costs for the inpatient stay and for the 30-day episode.

“Taken as a whole, these data suggest that appropriate inpatient specialty care may generate value for the healthcare system. This impact is seen in both quality and cost of care across a broad range of ID diagnoses.”

ID Specialist Involvement Improves Outcomes for Patients with Severe Infection

Severe Infectious Diseases from 130,000 Patient Cases

Early involvement of an ID Specialist in the care of patients with severe infection will lead to better outcomes with lower costs.

Stays With an Early ID Involvement

- **3.8%** shorter overall index stays
- **5.1%** shorter ICU stays
- **3.4%** lower costs for the index stay
- **6.2%** lower costs for the 30 days post index stay discharge

P-values for all statistics are <0.001
What Makes ID Specialists Unique?

ID Specialists possess strong competencies toward promoting team communication across and within the continuum of care, promoting effective care coordination and efficient use of resources.

ID Specialists maintain a long-term focus on risk reduction and safety through system-wide infection control efforts.

ID is one of the few specialties that focuses on efficient resource management, across various sites-of-service, as a core competency. This applies to infection control, antibiotic stewardship, diagnostic stewardship, the judicious use of radiology services, micro-lab services and hazardous waste management.

ID Specialists are effective managers of patient care transitions, employing Outpatient Parenteral Antimicrobial Therapy (OPAT) where appropriate to decrease LOS in the inpatient setting, and adopting technology to efficiently manage patients with at-home care.

Infectious Diseases Specialists are the keepers of the “intellectual capital” for treatment of HIV, viral hepatitis and other complicated and severe infections, in the face of growing drug resistance.
How to Effectively Leverage ID Specialists in Your Hospital:

- Consider encouraging ID consults for patients with select severe infections. An ID Specialist can help identify parameters to better identify these patients.

- Implement an ID Specialist-led Antimicrobial Stewardship Program.

- Engage the ID Specialists to lead Comprehensive Unit-based Safety Programs (CUSP) to reduce hospital-acquired infections.

- Explore ways to employ ID services through gain-sharing agreements and co-management services agreements.

The Infectious Diseases Society of America (IDSA), a professional organization of nearly 10,000 ID physicians, scientists and other infectious diseases experts, can help point you in the direction of resources and additional information.