Caring For Sepsis Along the Continuum: From the Community to Post –Hospital Care

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Sepsis Initiatives Across a Health System

- Describe the St. Peters's Health Partners (SPHP) System
- Review SPHP's role with Trinity Health
- Summarize my role with IPRO for education of health professionals and organizations for **early recognition of sepsis .**
- Profile some opportunities for spreading the **sepsis message through a system**

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- Member of Trinity Health – 94 acute care hospitals, coast-to-coast; 109 Continuing Care locations, 7,800 employed physicians
- SPHP has four (4) acute care hospitals,
- Eight (8) nursing /rehab centers
- Five (5) senior living/enriched housing facilities
- Homecare, VNA , Hospice, Drug/Alcohol Rehab
- Over 300 employed physicians in out patient practice

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Need to Address Sepsis Across the Care Continuum

- Once a patient recovers from a hospitalization with a diagnosis of any form of sepsis, we need to optimize our education across our system –
- Improve outcomes post discharge
- Decrease our re-admissions after Sepsis diagnosis – usually, the highest % diagnosis for readmission (30%+ range)

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SPHP Acute Care Initiatives

- Unified administration of Sepsis Protocols throughout our Acute Care Hospitals (some stress with 2 EMR's – Meditech/Soarian)
- Single system of recording data, results, action plans
- Single Sepsis Committee – joint monthly meeting
- Two (2) Sepsis Coordinators (responsible for 2 hospitals each).
- Utilize Midas system to analyze specific patient data for readmissions/areas for improvement

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Other System Opportunities Through Trinity Health

- Monthly Sepsis Care Optimization team meeting with Trinity
- Trinity provision of education materials, best practices from the system , and benchmarked Sepsis Scorecards
- Identification of Top Performers, sharing of experiences

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Early Recognition of Sepsis: An Opportunity in the Outpatient Setting

The Role of Practitioner, Patient and Family in the Earliest Phase of Sepsis

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Getting the Message Out Across the Care Continuum: Before It's Too Late!

- Early recognition of sepsis in the out-patient setting is paramount to improving outcomes as **80%** of sepsis begins outside the hospital (MMWR 2016;65).
- The majority of Sepsis admissions had a recent interaction with a provider/health care system **(up to 70%)**
- SNF/NH contribute nearly about **18%** of Sepsis admissions

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Newest Consensus Definitions for Sepsis: SOFA and qSOFA Scores

JAMA 2016; 315(8): 801-10

- **SOFA** Sequential Organ Failure Assessment Score. For ICU patients based on summary calculations:
- Respiratory function (PaO2/FiO2)
- Coagulation (Plats)
- Liver function (bilirubin)
- Hemodynamics (MAP)
- CNS (Glascow Coma Scale)
- Renal Function (Creat/ Urine output)

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Newest Consensus Definitions for Sepsis: qSOFA Scoring

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- **Quick SOFA (qSOFA)** - a novel, robust tool measuring only three (3) clinical (non-lab) variables predictive of outcomes in out-of-hospital, and non-ICU settings (ED/Wards).
- **Altered Mental Status (GCS <13)**
- **Hypotension (Systolic < 100mmHg)**
- **Tachypnea (RR> 22)**
- **Any 2 of 3 above provides simple bedside criteria to identify adults with suspected infection who are likely to have poor outcomes**

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Common Infectious Syndromes: Risk for Sepsis Progression

- Skin/ Soft Tissue Infections – *Strep/Staph*
- Endometritis (post-partum) – *Strep*/polymicrobic
- Urinary Tract Infections– device exchange, obstructive stone disease, post TRUS-P
- Pneumonia – *S. pneumoniae, Legionella*
- Enteritis – *C.difficle* , Invasive colitis
- Tick Borne Infections – *Babesia , Anaplasma*

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Recognition of Sepsis in the Outpatient Setting

- Along with qSOFA (AMS, hypotension, tachypnea) criteria being met, an appropriate search for any source of infection is needed.
- Cultures of blood and, if indicated, urine, sputum, or wounds, especially if associated with purulence and/or cellulitis.
- Recognize that diagnostic errors/ misses are a major factor in potential progressive infection and medical malpractice claims/awards

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Patient Education and Engagement : Recognition of Sepsis

- It is incumbent upon medical providers to educate patients, families and caregivers regarding the important features to be aware of in cases of possible infections that MAY proceed to sepsis upon leaving the office.
- With SIRS (or qSOFA) criteria being met, and a potential site of infection considered, a host of signs and symptoms must be reviewed if the decision is made not to admit the patient to an acute care setting

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Signs and Symptoms of Impending Sepsis, and Severe Sepsis: What the Patient and Family Need to Know

- Decrease, or darkening (concentrating) of urine output.
- Increase in finger stick blood glucose in diabetics.
- Ongoing fevers, chills, rigors despite treatment.
- Cool extremities or mottling of skin.
- Altered mental status (recognized by others)

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Focus on Comorbidities in the Outpatient Setting

- From MMWR 2016 report on retrospective review of 246 pts admitted with sepsis 97% had at least one comorbidity:
- Diabetes – 35%
- CVD – 32%
- CKD – 23%
- COPD – 20%
- Imperative to maximize Influenza and Pneumococcal vaccination

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Frontiers to Spread the Sepsis Message: Maximizing Your Network

- With the wide array of medical services and patients in a large Continuing Care network, and alignment with a regional ACO, SPHP has moved to spread education to:
- SNF/LTCF
- Alcohol and Drug Rehab (with the assist of IPRO)
- Aligned/Owned physician practices with Zone Sheets for Sepsis, UTI, SSTI.

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Alignment of Sepsis Education with Antibiotic Stewardship Efforts

- At all of our Acute hospitals, we have had dedicated Antibiotic Stewardship Programs (ASP) for up 8 years. PharmD and I.D. physicians, on the units, on the charts.
- Our system-wide ASP committee includes our Continuing Care members, to assist them in improving antibiotic prescribing outside the hospital – constructing O-P antibiograms.
- ASP Committee is linked to our Sepsis Committee to assist in antibiotic selection at "time zero", and our ASP team works with ICU and other providers to review sepsis cases at 48-72 hrs. – Optimazation/De-escalation/Discontinuation

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