This fact sheet provides an overview of recent evidence relevant to Infections and sepsis in elderly patients; Health surveillance models currently used and Delays in treatment - antibiotics and information on how the “Outreach Librarian Service” can support you to keep up-to-date.

Selected Evidence

Electronic Books *(available through your Athens account—MD Consult)*

**Diagnosis of systemic inflammatory response syndrome**  
.Liver function tests Helpful in localizing sepsis; consider biliary sepsis, especially in elderly patients with no obvious localizing signs...cultures Part of the diagnostic workup for sepsis Lumbar puncture and cerebrospinal fluid examination...

**Epidemiology**  
*Bope: Conn’s Current Therapy* 2011, 1st ed.; Section 2 - The Infectious Diseases >> Severe Sepsis and septic shock  
remarkable aspect of sepsis, severe sepsis, and septic shock is the relatively...of gram-negative and candidal sepsis in patients with hematologic malignancies. Although sepsis is most typically a disease of the elderly, the immune suppressed, and those...

**Significance of Screening Bacteriuria**  
*Wein: Campbell-Walsh Urology, 9th ed.;* Chapter 8 - Infections of the Urinary Tract >> Bacteriuria in the Elderly  
...Bacteriuria that leads to UTIs in elderly subjects in the presence of underlying...lead to severe renal damage. Sepsis and its sequel (sepsis syndrome and septic shock) are increasingly common in the elderly. This is in part due to the aggressive...

**Reports**

**Deliirium:** Diagnosis, prevention and management  
NICE clinical guideline 103 July 2010  

**Guidelines on Urological Infections** (Sepsis)  
M. Grabe (Chairman), T.E. Bjerklund-Johansen, H. Botto, M. Çek, K.G. Naber, P. Tenke, F. Wagenlehner  
European Association of Urology  2010  

**Management of patients with Dementia** - A National Clinical Guideline  
Scottish Intercollegiate Guidelines Network - Sign (86) 2011  
[http://www.sign.ac.uk/pdf/sign86.pdf](http://www.sign.ac.uk/pdf/sign86.pdf)

**Articles**

Abad, CL; Kumar, A and Safdar, N  
Antimicrobial therapy of sepsis and septic shock—When are two drugs better than one? (Review article)  
*Critical Care Clinics* April 2011: 27(2) e1-e27
Ahmed NN, Pearce SE (2010)
Acute care for the elderly: a literature review.

Alejandra, MM; Lansang, MAD; Dans, LF and Mantaring III JB
Intravenous immunoglobulin for treating sepsis, severe sepsis and septic shock
(Intervention Review)
*The Cochrane Library Review* 2010: Issue 2

Angus, DC
The lingering consequences of sepsis: A hidden public health disaster?
*Journal of the American Medical Association (JAMA)* June 2011: 305(21) 2145-2244

Casserly, B; Read, R and Levy MM
Hemodynamic monitoring in sepsis
*Critical Care Nursing Clinics of North America* March 2011: 23(1) 149-169

Caterino, JM; Jalbuena, T and Bogucki, B
Predictors of acute decomposition after admission in ED patients with sepsis

Coen, D; Vaccaro, A; Cazzaniga, M; Cortellaro, F; Monti, G and Tombini, V
Toward a noninvasive approach to early goal-directed therapy
*Chest* March 2011: 139(3) 726-7

Crowe, CA; Mistry, CD; Rzechula, K and Kulstad, CE
Evaluation of a modified early goal-directed therapy protocol

Daniels, R; Nutbeam, T; McNamara, G and Galvin, C
The sepsis six and the severe sepsis resuscitation bundle: A prospective observational cohort study

Francis, M; Rich, T; Williamson, T and Peterson, D
Effect of an emergency department sepsis protocol on time to antibiotics in severe sepsis
*Canadian Journal of Emergency Medical Care (CEJM)* July 2010: 12(4) 303-310

Gaieski, DF; Mikkelsen, ME; Band, RA; Pines, JM; Massone, R and Furia, FF
Impact of time to antibiotics on survival of patients with severe sepsis or septic shock in whom goal-directed therapy was initiated in the emergency department
*Critical Care Medicine* April 2010: 38(4) 1045-1053

Gomes Silva, BN; Andriolo, RB; Atallah, AN and Salomao, R
De-escalation of antimicrobial treatment for adults with sepsis, severe sepsis or septic shock
(Intervention Review)
*The Cochrane Library Review* 2010: Issue 2

Goyal, M; Pines, JM; Byron, C; Drumheller, DF and Gaeski, DF
Point-of-care testing at triage decreases time to lactate level in septic patients
Kouroumichakis, I; Papanas, N; Proikaki, S; Zarogoulidis, P and Maltezos, E
Statins in prevention and treatment of severe sepsis and septic shock
*European Journal of Internal Medicine* April 2011: 22(2) 125-133

Kumar, A; Safdar, N; Kathireddy, S and Chateau, D
A survival benefit of combination antibiotic therapy for serious infections associated with sepsis and septic shock is contingent only on risk of death: A meta-analytic/meta-regression study
*Critical Care Medicine* 2010: 38(8) 1651-1664

Martí-Carvajal, AJ; Sola, I; Lathyris, D and Cardona, AF
Human recombinant activated protein C for severe sepsis
*Intervention Review*
*The Cochrane Library Review* 2010: Issue 4

Meurer, WJ; Losman, ED; Smith, BL; Malani, PN and Younger, JG
Short-term functional decline of older adults admitted for suspected sepsis
*The American Journal of Emergency Medicine* 2010: (E Pub ahead of print)

Mikkelsen, ME; Gaieski, DF; Goyal, M; Miltiades, AN; Munson, JC; Pines, JM and Fuchs, BD
Factors associated with nonadherence to early goal-directed therapy in the ED
*Chest* September 2010: 138(3) 551-558

Nee, PA and Rivers, EP
The end of the line for the surviving sepsis campaign, but not for early goal-directed therapy
*Emergency Medicine Journal* January 2011: 28(3-4) 1472-0213

Nelson, JL; Smith, BL; Jared, JD and Younger, JG
Prospective trial of real-time electronic surveillance to expedite early care of severe sepsis

Powell, ES; Khare, RK; Courtney, DM and Feinglass, J
Volume of emergency department admissions for sepsis is related to inpatient mortality: Results of a nationwide cross-sectional analysis
*Critical Care Medicine* November 2010: 38(11) 2161-2168

Schorr, C
Performance improvement in the management of sepsis (Review article)
*Critical Care Nursing Clinics of North America* March 2011: 23(1) 203-213

Shorr, AF; Micek, ST; Welch, EC; Doherty, JA; Reichley, RM, Kollef, MH
Inappropriate antibiotic therapy in Gram-negative sepsis increases hospital length of stay
*Critical Care Medicine* January 2011: 39(1) 46-51

Seymour, CW; Cooke, CR; Mikklesen, ME; Hylton, J; Rea, TD; Goss, CH; Gaeski, DF and Band, RA
Out-of-hospital fluid in severe sepsis: Effect on early resuscitation in the emergency department
*Prehospital Emergency Care* April 2010: 14(2) 145-152

Siddiqui, S and Razzack, J
Early versus late pre-intensive care unit admission broad spectrum antibiotics for severe sepsis in adults (Intervention Review)
The Cochrane Library Review 2010: Issue 10

Sweet, DD; Jaswal, D; Bouchard, M; Sivapalan, P; Rachel, J and Chittock, D
Effect of an emergency department sepsis protocol on the care of septic patients admitted to the Intensive care unit
*Canadian Journal of Emergency Medical Care (CJEM)* September 2010: 12(5) 414-420
Tiruvoipati, R; Ong, K; Gangopadhyay, H; Arora, S and Botha, J
Hypothermia predicts mortality in critically ill elderly patients with sepsis
_BMC Geriatrics_ 2010: 10(70) 1471-2318

Wang, HE; Weaver, MD; Shapiro, NI and Yealy, DM
Opportunities for emergency medical services care of sepsis
_Resuscitation_ February 2010: 81(2) 193-197

Yang, Y; Yang, KS; Hsann, YM; Lim, V and Ong, BC
The effect of comorbidity and age on hospital mortality and length of stay in patients with sepsis
_Journal of Critical Care_ September 2010: 25(3) 398-405

Zubert, S; Funk, DJ and Kumar, A
Antibiotics in sepsis and septic shock: Like everything else in life, timing is everything
_Critical Care Medicine_ April 2010:38(4) 1211-1212

**How can I help you?**

**Literature search service**
I can offer an expert, in-depth literature search service to help you locate the evidence on any health related topic.

**Training**
If you want to learn to navigate the wealth of available online healthcare information and how to search databases more effectively, the ‘Trust trainer’ can offer timetabled hands-on training sessions or can provide customised one-to-one support. Telephone: 0121 424 0583 or email: _laura.lewis2@heartofengland.nhs.uk_

**Current awareness services**
If you need to keep up-to-date on a particular topic I can advise on suitable RSS feeds and help you set up article alerts from the major healthcare databases.

**Online resources**
Whilst many good quality resources are freely available, most full-text journals and the main bibliographic databases (e.g. Medline and CINAHL) require an Athens username and password. To register for an Athens login go to _www.athens.nhs.uk_

The Library web pages contain detailed information about library services and training opportunities, online request and registration forms and several guides on key online resources and evidence-based websites at _www.heftlibrary.nhs.uk_

**Contact**
The Outreach Librarian is located in the education centre at Heartlands Hospital, on the first floor, next to the Library.
Telephone 0121 424 2583 (42583) or email: _ann.button@heartofengland.nhs.uk_