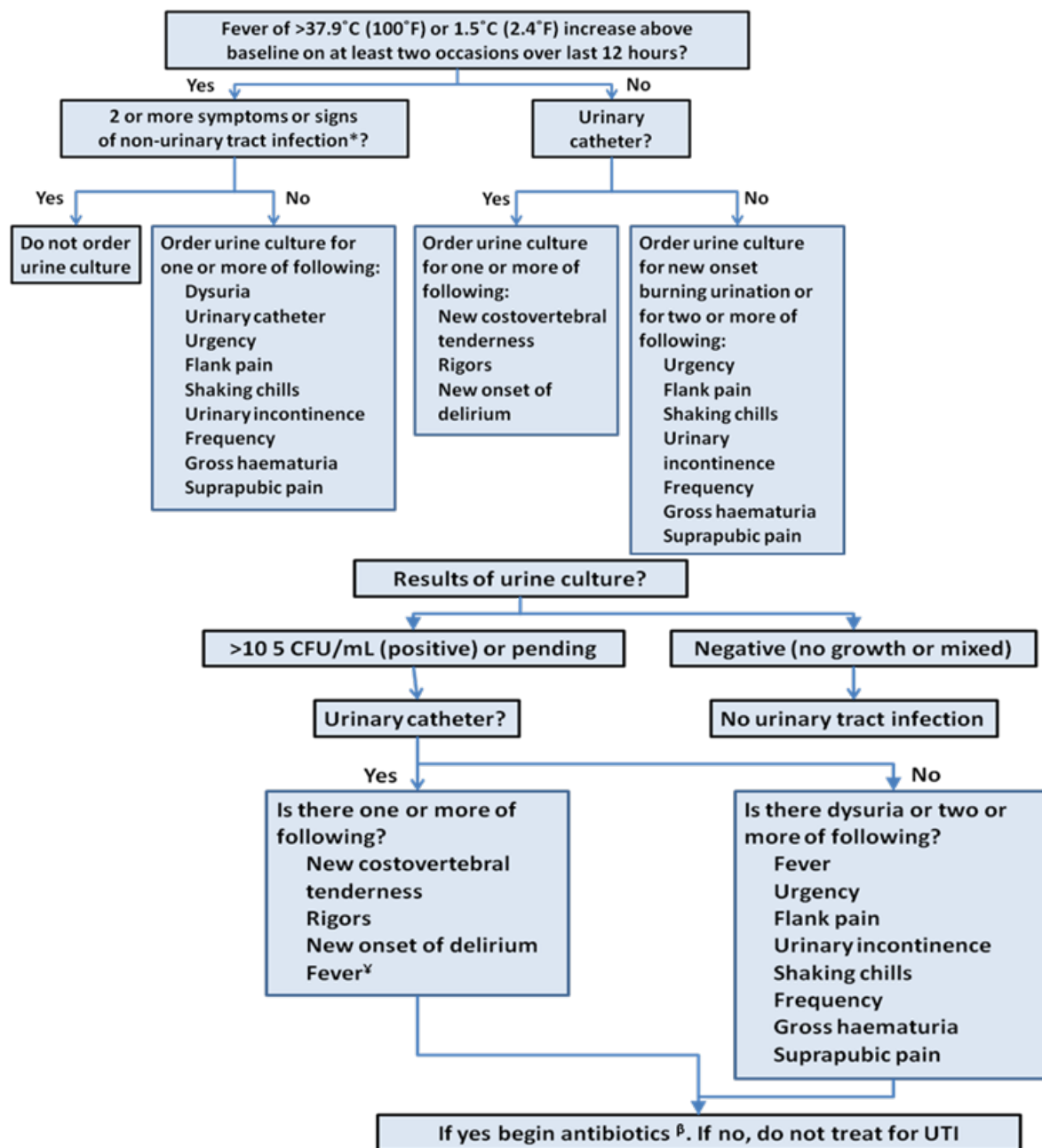**Diagnostic algorithm for ordering urine cultures and starting antibiotics if positive for nursing home residents in the intervention arm in the Loeb trial. (Loeb 2005)**

*Respiratory symptoms include increased shortness of breath, increased cough, increased sputum production, new pleuritic chest pain. Gastrointestinal symptoms include nausea or vomiting, new abdominal pain, new onset of diarrhoea. Skin and soft tissue symptoms include new redness, warmth, swelling, purulent drainage.
¥ >37.9˚C (100˚F) or 1.5˚C (2.4˚F) above baseline on two occasions over last 12 hours
B Stop antibiotics if urine culture is negative or no pyuria is present

Patients were considered for antibiotic treatment based on presence of fever greater than 37.9˚C or 1.5˚C increase above baseline on at least two occasions over last 12 hours and one or more signs of UTI (Loeb 2005). The algorithm used is shown in Figure. Fewer courses of antibiotics for suspected urinary tract infections per 1000 resident days were prescribed in the intervention nursing homes than in control care homes (1.17 *v* 1.59 courses per 1000 resident days). Antimicrobials for suspected UTI represented 28.4% of all courses of drugs prescribed in the intervention nursing homes compared with 38.6% prescribed in the control care homes (weighted mean difference – 9.6%, − 16.9% to –2.4%). No significant difference was found in admissions to hospital or mortality between the study arms.

Loeb, M., et al 2005. Effect of a multifaceted intervention on number of antimicrobial prescriptions for suspected urinary tract infections in residents of nursing homes: cluster randomised controlled trial. *BMJ*, 331, (7518)