Summary Table: RCT/nRCT and systematic evidence for alternative to admissions for the older population

Intervention/ setting	Paramedic/ emergency care practitioner	Emergency department	Community hospital	Hospital at home Heart Failure	Hospital at home COPD	Hospital at home Pulmonary embolism	Hospital at home Pneumonia	Hospital at home Stroke	Hospital at home Uncomplicated diverticulitis	Hospital at home Older population with acute medical problems
Primary studies identified 19 studies over 24 papers n=10 RCT, n=9 nRCT	n=3 (RCT & 2 nRCT) Mason 2007 Gray 2008 Mason 2012	n=3 (RCT & 2 nRCT) Sun 2014 Benaiges 2014 Salvi 2008	n=2 RCT Vicente 2014 Garåsen 2007, 2008ab	n=3 RCT Mendoza 2009/García-Soleto 2013 Tibaldi 2009 Patel 2008	n=1 RCT Ricauda 2008	n=1 nRCT Rodriguez-Cerillo 2009	n=1 RCT Carratala 2005	n=1 RCT (3 arm) Kalra 2005	n=1 nRCT Rodriguez-Cerrillo 2013	n=3 nRCT Leff 2005/2009/Frick 2009 Crilly 2011 Lau 2013
Main conclusions of primary studies Statistically significant differences between alternative care and acute hospital care	Mason RCT **Reduction:** Risk of ED attendance, Risk of hospital readmission. **Increase:** Satisfaction with care Mean duration of care Subsequent unplanned contacts with secondary care **Comparable:** Mortality Two nRCTs report greater reduction in admissions No cost data	Sun RCT **Reduction:** Time of episode of care Less likely to be admitted into hospital Costs **Comparable:** Serious events QoL Satisfaction with care ****************** Benaignes nRCT **Reduction:** Readmissions Costs ****************** Salvi nRCT no differences	Vincente Data limited. Neither formal analyses nor cost data presented. ****************** Garåsen **Reduction:** Hospital readmissions Receiving any care at 26 wks Deaths Total costs & mean costs per patient **Increase:** Observation period *****************	Meta-analysis in systematic review	**Reduction:** Readmissions Mean cost per patient **Increase:** Length of stay. **Comparable:** Depression QoL Mortality	**Comparable:** Mean length of stay No major bleeding, thrombosis or death in either group No cost data	**Increase:** Patients were satisfied with care **Comparable:** An overall 'successful outcome' Readmissions QoL Adverse drug reactions Medical complications Mortality No cost data	**Increase:** Mortality & institutionalisation. **Reduction:** QoL scores basic activities of daily living Costs were lower for HaH group but eclipsed by poorer patient outcomes.	Limited data. **Reduction:** Cost reduction of €1368 per patient. **Comparable:** Mean length of stay	Leff **Reduction:** Length of stay Mean treatment cost **Comparable:** Use of health services ED visits or readmission ************************* Crilly **Increase:** Longer time in ED **Comparable:** Length of episode of total care No mortality or cost data *********************** Lau **Reduction:** Length of stay **Comparable:** Mortality Readmissions No cost data
Systematic review identified	NO	NO	NO	Quaddoura 2015	Jeppesen 2012	Vinson 2012	Chalmers 2011	Shepperd 2016 Chalmers 2011	Varney 2014	NO
Description of, and main conclusions of systematic review				3 RCTs as above used in meta-analysis **Increase:** Time to first readmission HQoL at 6 &12 mths **Reduction:** Costs for index treatment **Comparable:** Rate of readmission All-cause mortality	8 RCTs 7 did not fit inclusion criteria plus RCT detailed above. **Review summary:** Selected COPD patients can be safely & successfully treated at home. Favourable readmission rates. A trend towards reduced mortality rate	7 observation studies plus one nRCT detailed above. **Review summary:** Data are limited, but evidence supports the feasibility & safety of for carefully selected low risk patients.	5 studies comprising variety of designs plus one RCT detailed above **Review summary:** Interventions appear safe. Comparable for mortality, hospital readmissions patient satisfaction. Insufficient data for quality of life or return to usual activities.	Two previous systematic reviews on a mixture of conditions including one RCT described above	Integrative review on admission-avoidance HaH services and included one nRCT described above	