Figure 1: PRISMA 2020 flow diagram.[18]

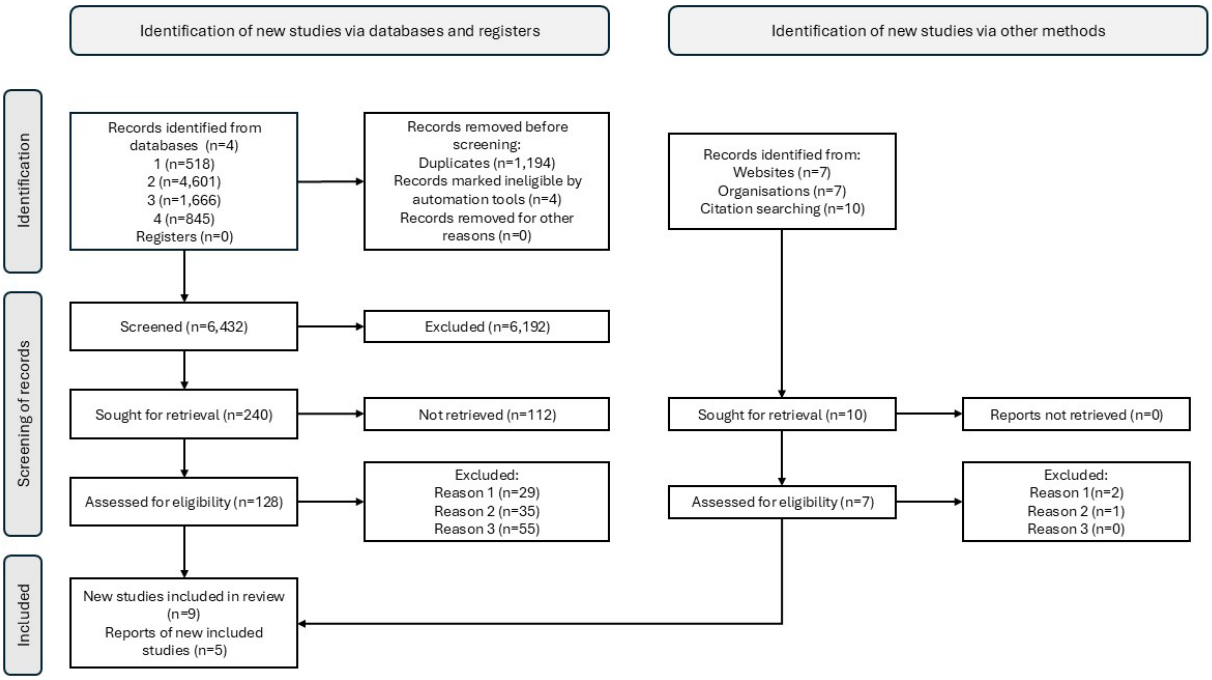

Table 1: Data extraction table.

Citation	Objectives	Interventions	Design	Location	Outcomes measures	Results
Charlton et al., 2023	Evaluated clinical effectiveness of falls rapid response service	Paramedic and OT responded between 7 am–7 pm, 7 days/week	Cross-sectional study	England	Proportion of patients conveyed to hospital compared to those not conveyed versus standard ambulance crews	Falls rapid response service is clinically effective compared to care delivered by standard ambulance crews
College of Occupational Therapists, 2015	Deliver key information on OT contributions to primary care, A&E, critical care and other specialist settings	Year-long data gathering on effectiveness of OT in settings, including rapid response service	Report	England	Cost–benefit analysis	Reduction in pressure on GP services, reduce risk of admission and readmission, cost reductions in urgent care due to such things as falls
College of Occupational Therapists, 2016	How occupational therapy can reduce unnecessary transfers into A&E departments and admissions, and ease the patient's journey to timely and safe discharge home	Year-long data gathering on admission to hospital and discharge to home	Report	England	Patient outcomes (health experience, QoL), hospital flow, cost–benefit analysis	Reduction in hospital admissions and time in hospital, success on transition and discharge
Dean et al., 2022	Observations drawn from NHS Getting It Right First Time programme	Integrating fall practitioners with ambulance services may prevent or accelerate hospital-based assessment	Process and systems review	England	None	Acute frailty service for 7-day provision with community–ambulance collaboration was seen as plausible design option
Kanne et al., 2022	A quality improvement project evaluation of a new falls reduction clinic	A nurse practitioner– and physical therapist–led assessment process Participants received a 6-week phone call and a 12-week follow-up visit	Descriptive, single group	USA	30-second chair stands, timed pp and go, 4-item Dynamic Gait Index, Activities-specific Balance Confidence Scale, end of engagement surveys	Participants reported making behavioural changes to reduce falls risk and intentions to continue with exercise programmes A multidisciplinary approach combined with personalised strategies and ongoing monitoring can lead to reduced falls risk

Table 1 (continued): Data extraction table.

Citation	Objectives	Interventions	Design	Location	Outcomes measures	Results
Logan et al., 2010	Evaluation of a community falls prevention service for older people who call an ambulance but are not taken to the hospital	Referral to community fall prevention services or standard medical and social care (OT, physiotherapists, nurses) Strength training, home hazards assessment, medication review, and 12 2-hour, twice-weekly group programme sessions	RCT	England	Rate of falls over 12 months, Barthel Index, Nottingham Extended Activities of Daily Living Scale and Falls Efficacy Scale scores at baseline and by postal questionnaire at 12 months	A community-based service to prevent falls reduced the number of falls over a year in older people (>60 years) who had called an emergency ambulance owing to a fall but not been taken to hospital The service also led to increased levels of activities of daily living and reduced fear of falling
Mikolaizak et al., 2017	Evaluated tailored interventions for older community-dwellers who did not need ED transportation after a fall	Intervention group received post-acute services from physiotherapy, OT, optometry, pharmacist, specialist medical review through outpatient clinic Control group received written advice to address fall risk factors and to speak to healthcare provider	Single blind parallel group RCT	Australia	Rates of falls and injurious falls Ambulance re-attendance, ED presentations, hospitalisations, and QoL over 12 months, level of uptake to recommendations, health service use	The multidisciplinary intervention did not effectively prevent falls in older adults who received paramedic care but were not transported to the ED; this could be due to exercise fatigue and increased falls risk Nevertheless, the intervention proved to be effective in reducing falls among participants who adhered to the recommended interventions

Table 1 (continued): Data extraction table.

Citation	Objectives	Interventions	Design	Location	Outcomes measures	Results
Paul et al., 2021	Described the reach of a fall prevention programme among community-dwelling adults aged ≥65 years and assessed fall-related ambulance use and hospitalisations	A multifactorial group-based fall prevention programme incorporating behaviour change and exercise through seven weekly sessions	Observational stepped-wedge study	Australia	Fall-related ambulance usage and hospital admissions were compared within statistical local areas before and after the implementation programme	The study did not show a reduced rate of fall-related ambulance use or hospital admissions across the entire sample of older adults. However, there was a potential reduction in fall-related ambulance callouts for individuals aged 75–84 years following the programme
Quatman-Yates et al., 2022	Optimised fall prevention within community paramedic operations and assessed its impact on emergency service utilisation rates	Implementation science framework and quality improvement methods used to design and optimise the fall prevention model of care Interrupted time series analysis used to evaluate relative risk reduction from a 12-month baseline period to a 12-month post-implementation period	Quality improvement initiative	USA	Relative risk reduction in the number of community-level, fall-related 911 calls and fall-related hospital transports	Community paramedic home visits increased significantly over the study period, showing an increase in the number of households benefiting from the programme Findings suggest that this programme offers a powerful mechanism for community paramedics to reduce fall-related 911 calls and transports to hospitals
Snooks et al., 2012	Evaluating the SAFER 2 protocol allowing paramedics to assess and refer older fallers to community-based falls services	Paramedic application of SAFER 2 protocol with control group receiving care as usual	Pragmatic cluster randomised trial	England	Number of further falls, health-related quality of life, fear of falling, patient satisfaction, and quality and pathways of care at the index incident	No evidence of improved health outcomes or reductions in overall NHS emergency workload

Table 1 (continued): Data extraction table.

Citation	Objectives	Interventions	Design	Location	Outcomes measures	Results
Van Dam et al., 2022	Evaluated OT outreach role providing rapid response service to high-risk individuals	12-month trial of 7-day rapid response service offering short-term OT interventions with additional competency training in nutrition and mobility assessment Interventions provided: home modifications, equipment/aides, falls education, occupation changes, person-related changes, cognition, pressure injury, mobility, nutritional, access to services, onward referrals	Convergent, parallel mixed methods	Australia	Risk of falls, malnutrition, pressure injuries, number of falls in last 12 months, socio-economic status	There is a need for the care provided by this service, and the service has made a positive impact on the lives of clients and their carers. The interventions have contributed to possible hospital avoidance, benefiting clients and healthcare organisations
Watson et al., 2021	Examined the impact of rapid response services with telecare services for clients with complex needs in social housing	Semi-structured qualitative interviews with service users, commissioners, service providers, adult social care and family carers via telehealth	A descriptive qualitative model	England	Thematic analysis The quality of life for service users and carers, including their ability to remain independent for longer, and the resource benefits for health and social care providers	The rapid response team reduced the number of ambulance requests resulting from falls Those with electronic monitoring/ telecare support were able to stay in their homes longer, reducing the need for residential funding by the local authority Positive outcomes for both elder and carers

OT = occupational therapist; A&E = accident and emergency; GP = general practitioner; QoL = quality of life; NHS = National Health Service; USA = United States of America; RCT = randomised control trial; ED = emergency department.