Appendices

Appendix 1 – description of Allied Health Professional Roles

Source: NHS England/Improvement Allied Health Professionals webpage
https://www.england.nhs.uk/ahp/role/

Art Therapists

Art therapists use art as a form of psychotherapy to encourage clients to explore a variety of issues including emotional, behavioural or mental health problems, learning or physical disabilities, life-limiting conditions, neurological conditions or physical illnesses.

People of all ages from children to the elderly, regardless of artistic experience, use art therapy in this way as an aid to supporting them with their particular concern. It is not a diagnostic tool but rather a mode of communication and expression.

Drama therapists

Drama therapists are both clinicians and artists that draw on their knowledge of both theatre/drama and therapy to use performance arts as a medium for psychological therapy. Clients are able to explore a wide variety of different issues and needs from autism and dementia to physical/sexual abuse and mental illness in an indirect way leading to psychological, emotional and social changes.

Drama therapists can be found in many varying settings such as schools, mental health care, general health social care, prisons and in the voluntary sector.

Music therapists

Music therapists engage clients in live musical interaction so as to promote an individual's emotional wellbeing and improve their communication skills. Clients do not need to have any previous experience of playing a musical instrument (or even singing) as this established psychological clinical intervention utilises their unique connection to music and the relationship established with their therapist to help: develop and facilitate communication skills, improve self-confidence and independence, enhance self-awareness and awareness of others, and improve concentration and attention skills.

In particular, music therapy is an effective intervention for those clients who cannot speak due to disability, illness or injury as their psychological, emotional, cognitive, physical, communicative and social needs can be addressed through the musical interaction with their therapist.

Music therapy can be beneficial for individuals of all ages and physical abilities however, from new born babies in terms of establishing the parent-child bond to those receiving palliative, end-of-life care.

Chiropodists/podiatrists

Podiatrists provide essential assessment, evaluation and foot care for a wide range of patients with a variety of conditions both long term and acute. Many of these fall into high risk categories such as patients with diabetes, cerebral palsy, peripheral arterial disease and peripheral nerve damage where podiatric care is of vital importance.

Many podiatrists have become further specialised into either the area of biomechanics or surgery. Biomechanics is often associated with treating sports related injuries but spans across a wide range of conditions including children and the elderly.

Podiatric surgeons offer surgical interventions in all aspects of foot health management. Podiatrists work in both the community and acute settings and while many are employees of the NHS many podiatrists now provide healthcare services in the private sector.

Dietitians

Dietitians are the only qualified health professionals who assess, diagnose and treat diet and nutritional problems at an individual and wider public health level.

Uniquely, dietitians use the most up–to-date public health and scientific research on food, health and disease, which they translate into practical guidance to enable people to make appropriate lifestyle and food choices. Dietitians are the only nutrition professionals to be regulated by law, and are governed by an ethical code to ensure that they always work to the highest standard.

Dietitians work in the NHS, private practice, industry, education, research, sport, media, public relations, publishing, government and Non-Government Organisations (NGOs). Dietitians advise and influence food and health policy across the spectrum from government, to local communities and individuals.

Occupational therapists

Occupational therapists (OTs) work in the NHS, local authority social care services, housing, schools, prisons, voluntary and independent sectors, and vocational and employment rehabilitation services as well as in education and research. Occupational therapists work with people of all ages with a wide range of problems resulting from physical, mental, social or developmental difficulties.

OTs support people with a range of interventions to enable them to return to or optimise participation in all the things that people do; for example, caring for themselves and others, working, learning, playing and interacting with others. Being deprived of or having limited access to any or all of these occupations can affect physical and psychological health and hence OTs positively impact upon the wellbeing and rehabilitation of patients in most care pathways and in the broader public health and social care environment.

Operating Department Practitioners

Operating Department Practitioners (ODPs) are highly skilled healthcare practitioners that support patients of all ages during each phase of the patient's perioperative care:

Anaesthetic – provide patient-centred care and prepare specialist equipment and drugs

Surgical – prepare all the necessary equipment and instruments for operations and providing these to the surgical team during the operation

Recovery – supporting the patient throughout their time in the recovery ward, assessing vitals and fitness for return to the ward

As well as providing this specialised care, ODPs are responsible for preparing the operating theatre and maintaining communication between the surgical team, operating theatre and wider hospital.

ODPs typically work in operating departments however their skills are increasingly being needed in other critical care areas within a hospital.

Orthoptists

Orthoptic clinical practice encompasses both diagnosis and treatment and is wide ranging. Orthoptists help premature infants with retinopathy of prematurity, children with reduced vision due to squint, adults and children with eye movement defects due to diabetes, hypertension, endocrine dysfunction, cancer, trauma and stroke. Extended scope orthoptic practitioners now work in high volume ophthalmic specialities such as glaucoma, cataract and age related macular degeneration.

Orthoptists work in acute hospital and community settings in health and education often as part of a multi-disciplinary medical, nursing and AHP team.

Osteopaths

Osteopaths take a holistic view of the structure and function of the body to diagnose and treat a wide variety of medical conditions. Their work is centered on the principle that the skeleton, muscles, ligaments and connective tissues of an individual need to function smoothly together so as to maintain wellbeing.

Osteopaths use a number of non-invasive treatments such as touch, physical manipulation, stretching and massage to restore bodily equilibrium through increasing the mobility of joints, relieving muscle tension, enhancing blood and nerve supply to tissues, and encouraging an individual's own healing mechanisms.

Prosthetists and Orthotists

Prosthetists are autonomous registered practitioners who provide gait analysis and engineering solutions to patients with limb loss. They are extensively trained at

undergraduate level in mechanics, bio-mechanics, and material science along with anatomy, physiology and pathophysiology. Their qualifications make them competent to design and provide prostheses that replicate the structural or functional characteristics of the patients absent limb.

They treat patients with congenital loss as well as loss due to diabetes, reduced vascularity, infection and trauma. Whilst they are autonomous practitioners they usually work closely with physiotherapists and occupational therapists as part of multidisciplinary amputee rehabilitation teams.

Orthotists are autonomous registered practitioners who provide gait analysis and engineering solutions to patients with problems of the neuro, muscular and skeletal systems. They are extensively trained at undergraduate level in mechanics, bio-mechanics, and material science along with anatomy, physiology and pathophysiology. Their qualifications make them competent to design and provide orthoses that modify the structural or functional characteristics of the patients' neuro-muscular and skeletal systems enabling patients to mobilise, eliminate gait deviations, reduce falls, reduce pain, prevent and facilitate the healing of ulcers.

They treat patients with a wide range of conditions including diabetes, arthritis, cerebral palsy, stroke, spina bifida, scoliosis, musculoskeletal, physiotherapy, sports injuries and trauma. Whilst they often work as autonomous practitioners they increasingly often form part of multidisciplinary teams such as within the diabetic foot team or neuro-rehabilitation team.

Paramedics

Paramedics are the senior ambulance service healthcare professionals at an accident or a medical emergency. Often working by themselves, paramedics are responsible for assessing the patient's condition and then giving essential treatment. They use high-tech equipment such as defibrillators, spinal and traction splints and intravenous drips, as well as administering oxygen and drugs.

Physiotherapists

Physiotherapy uses physical approaches to promote, maintain and restore physical, psychological and social well-being, working through partnership and negotiation with individuals to optimise their functional ability and potential.

Physiotherapists address problems of impairment, activity and participation and manage recovering, stable and deteriorating conditions – particularly those associated with the neuro-muscular, musculo-skeletal, cardio-vascular and respiratory systems – through advice, treatment, rehabilitation, health promotion and supporting behavioural change.

Physiotherapy uses manual therapy, therapeutic exercise, the application of electro-physical modalities and other physical approaches in response to individual need. Physiotherapists work across sectors and settings, including acute, community and workplace settings, and with a large number of population and patient groups including children, the working population, and older people.

Speech and language therapists

Speech and language therapists (SLTs) in the UK work with children and adults to help them overcome or adapt to a vast array of disorders of speech, language, communication and swallowing.

These include helping young children to access education, working with young offenders to enable them to access the programmes designed to reduce reoffending, reducing life-threatening swallowing problems in the early days after stroke and providing essential support to adults with a range of acquired neurological communication difficulties to help them return to work, and their roles in their family and society.

Radiographers
Diagnostic radiographers

Diagnostic radiographers use a range of techniques to produce high quality images to diagnose an injury or disease. They are responsible for providing safe and accurate imaging examinations and increasingly also the resulting report. Diagnostic imaging is a component of the majority of care pathways.

Radiographers are also key team members in Breast Screening and Ultrasound monitoring of pregnancy.

Therapeutic radiographers

Therapeutic radiographers play a vital role in the treatment of cancer. They are also responsible as they are the only health professionals qualified to plan and deliver radiotherapy. Radiotherapy is used either on its own or in combination with surgery and/or chemotherapy.

Therapeutic radiographers manage the patient pathway through the many radiotherapy processes, providing care and support for patients throughout their radiotherapy treatment.

Appendix 2: MEDLINE search strategy

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) <1946 to February 08, 2021>

1 ("allied health profession*" or ahp* or "art therap*" or "music therap*" or dramatherap* or "drama therapi*" or chiropod* or podiat* or dietitian* or "occupational therap*" or orthoptist* or paramedic* or physiotherap* or prosthetist* or orthotist* or radiographer* or "speech and language therap" or "speech therap*" or "language therap*").ti,ab. or allied health personnel/ or allied health occupations/ or nutritionists/ or physical therapists/ or (dietetic* or clinical psycholog* or operating department practice* or ODP or operating department practitioner* or osteopath* or paramedic* or physical therap* or speech patholog* or speech-language patholog*).ti,ab. or Art Therapy/ or exp Music Therapy/ or exp psychodrama/ or exp podiatry/ or exp nutrition therapy/ or exp dietetics/ or exp occupational therapy/ or exp orthoptics/ or exp radiography/ or exp speech therapy/ 1366805

2 (housing instability or housing insecurity or housing strain or housing security or mortgage problems or foreclosure or eviction* or housing loss or home repossession* or home ownership or (repossess* adj3 hous*) or (repossess* adj3 propert*) or mortgage delinquency or mortgage arrears or mortgage debt* or overcrowding).ti,ab. 5010

3 Cultural Deprivation/ or Acculturation/ or Culture/ or Cross-Cultural Comparison/ or Cultural Diversity/ or "Transients and Migrants"/ or exp "Emigrants and Immigrants"/ or Minority groups/ or Minority health/ or Prejudice/ or Racism/ or Xenophobia/ or Social Discrimination/ or exp Race Relations/ or exp Ethnic Groups/ or Refugees/ or minorit*.ti,ab. or migration background.ti,ab. or racial.ti,ab. or racism.ti,ab. or ethnology.ti,ab. or race.ti,ab. or ethnic*.ti,ab. or non?English.ti,ab. or language other than.ti,ab. or english as a second language.ti,ab. or foreign language.ti,ab. 494186

4 exp Gender Identity/ or Women's Health/ or gender differences.ti,ab. or (sex disparit* or sex difference?).ti,ab. or gender identity.ti,ab. or sex role.ti,ab. or wom#n* role?.ti,ab. or m#n* role?.ti,ab. or gender* role?.ti,ab. or servicewomen.ti,ab. 122013

5 Social Stigma/ or exp Social Support/ or Trust/ or Social conditions/ or Social isolation/ or Social marginalization/ or Anomie/ or social exclusion.ti,ab. or neighbo*rhood disorder.ti,ab. or social disorgani?ation.ti,ab. or anomie.ti,ab. or social support.ti,ab. 134265

6 Health Status Disparities/ or Health Services Accessibility/ or Health Equity/ or health*care disparit*.ti,ab. or health care disparit*.ti,ab. or health status disparit*.ti,ab. or health disparit*.ti,ab. or health inequalit*.ti,ab. or health inequit*.ti,ab. or medically underserved.ti,ab. or (digital adj3 (exclud* or exclud* or access* or divide)).ti,ab. or exp digital divide/ 108761

7 exp "Sexual and Gender Minorities"/ 7635

8 (Lesbian* or gay* or bisexual* or bi-sexual* or transgender or trans-gender* or gender nonconforming or lgbt* or lbg-tgnc or non-binary or nonbinary or homosexual* or homo-sexual* or "women who have sex with women" or "men who have sex with men").ti,ab. or exp "Sexual and Gender Minorities"/ or exp transgender person/ or exp transsexualism/ 46899

9 exp intellectual disability/ or exp learning disabilities/ or mentally disabled persons/ or ((mental* or intellect* or development* or learning*) adj1 (deficien* or disabilit* or retard* or disorder* or impair*)).ti,ab. or (intellect* adj1 function*).ti,ab. 209192

10 exp disabled persons/ or (physical* adj1 (deficien* or disabilit* or disorder* or impair*)).ti,ab. or (blind* or deaf* or ((sight* or eyesight* or vision* or hearing) adj3 (impair* or deficien*))).ti,ab. 432350

11 (sex worker* or sex-worker* or sexworker* or prostitut*).ti,ab. or exp prostitution/ or exp sex workers/ or exp sex work/ 11595

12 ((Gypsy* or gypsies or gipsy* or gipsies) not (moth or moths)).ti,ab. 1809

13 (Roma or romas or romany or romani or romanis or romanies or romanian).ti,ab. 4393

14 (arli or arlis or ashkali or ashkalis or aurari or auraris or balkan egyptian or balkan egyptians or bashalde or bashaldes or boyash* or churari or churaris or cigano or ciganos or erlide or erlides or gitano or gitanos or gitans or horahane or horahanes or kalderash* or lalleri or lalleris or lingurari or linguraris or lovari or lovaris or ludar or ludars or ludari or ludaris or luri or luris or machvaya or machvayas or manouche or manouches or manush or manushs or manushes or modgar or modgars or modyar or modyars or romanichal or romanichals or romanichel or romanichels or romanis?l or romanis?ls or romungro or romungros or rudari or rudaris or tsigane or tsiganes or ungaritza or ungaritzas or ursari or ursaris or yerlii or yerliis or zl?tari or zl?taris).ti,ab. 54

15 (sinti or sinta or sinte or sintis or sintas or sintes).ti,ab. 25

16 (Ceardannan* or (yenish* or yeniche* or jenische*) or (quinqui* or mercheros*)).ti,ab. 60

17 (fairground* or fair-ground* or funfair* or fun-fair* or showmen* or show-men* or sho?women* or show-women* or showperson* or show-person* or showpeople* or show-people* or show communit* or show travel?er*).ti,ab. 263

18 (circus* or (bargee* or canal boat* or barge* or boat-dwell*) or (pavee* or minceir* or lucht* or luchd* or itinerant*) or (travel?er* and (communit* or family or families or irish or ireland* or eire or wales or welsh or scottish or scotland* or highland* or norwegian* or norway* or newage or new-age or itinerant* or minorit* or ethnic* or halting site* or caravan*)) or (travel?ing adj5 (communit* or family or families or irish or ireland* or eire or wales or welsh or scottish or scotland* or highland* or norwegian* or norway* or newage or new-age or itinerant* or minorit* or ethnic* or site* or caravan*))).ti,ab. 3797

19 (homeless* or (rough adj sleep*) or vagrant* or (street adj (person* or people* or youth* or child*)) or sofa-surf* or sofa surf* or sofasurf* or unstably housed or housing instability or runaway* or refugee* or asylum* or migrant* or immigrant* or (displaced adj (people* or person*))).ti,ab. or exp homeless persons/ or homeless youth/ or exp refugees/ 72313

20 or/2-19 1475212

21 Meta-Analysis as Topic/ or meta analy$.tw. or metaanaly$.tw. or Meta-Analysis/ or (systematic adj (review$1 or overview$1)).tw. or exp Review Literature as Topic/ or cochrane.ab. or embase.ab. or (psychlit or psyclit).ab. or (psychinfo or psycinfo).ab. or (cinahl or cinhal).ab. or science citation index.ab. or bids.ab. or cancerlit.ab. or reference list$.ab. or bibliograph$.ab. or hand-search$.ab. or relevant journals.ab. or manual

search$.ab. or ((selection criteria or data extraction).ab. and Review/) or (review or systematic review).pt. or review*.ti. 3126115

22 (meta-ethnograph* or metaethnograph* or (narrative adj2 (review* or overview* or literature or synthesis)) or (meta-narrative or metanarrative) or critical interpretive synth* or qualitative evidence synthes* or rapid evidence assessment or (review* adj3 (scoping or mapping or rapid or realist or umbrella or qualitative)) or best fit synthesis or critical interpretive synthesis or framework synthesis or meta-aggregation or metaaggregation or meta-interpretation or metainterpretation or meta-study or metastudy or meta-synthesis or metasynthesis or realist synthesis or thematic synthesis).ti,ab. 36751

23 21 or 22 3129824

24 1 and 20 and 23 4591

25 (afghanistan or albania or algeria or american samoa or angola or "antigua and barbuda" or antigua or barbuda or argentina or armenia or armenian or aruba or azerbaijan or bahrain or bangladesh or barbados or republic of belarus or belarus or byelarus or belorussia or byelorussian or belize or british honduras or benin or dahomey or bhutan or bolivia or "bosnia and herzegovina" or bosnia or herzegovina or botswana or bechuanaland or brazil or brasil or bulgaria or burkina faso or burkina fasso or upper volta or burundi or urundi or cabo verde or cape verde or cambodia or kampuchea or khmer republic or cameroon or cameron or cameroun or central african republic or ubangi shari or chad or chile or china or colombia or comoros or comoro islands or iles comores or mayotte or democratic republic of the congo or democratic republic congo or congo or zaire or costa rica or "cote d'ivoire" or "cote d' ivoire" or cote divoire or cote d ivoire or ivory coast or croatia or cuba or cyprus or czech republic or czechoslovakia or djibouti or french somaliland or dominica or dominican republic or ecuador or egypt or united arab republic or el salvador or equatorial guinea or spanish guinea or eritrea or estonia or eswatini or swaziland or ethiopia or fiji or gabon or gabonese republic or gambia or "georgia (republic)" or georgian or ghana or gold coast or gibraltar or greece or grenada or guam or guatemala or guinea or guinea bissau or guyana or british guiana or haiti or hispaniola or honduras or hungary or india or indonesia or timor or iran or iraq or isle of man or jamaica or jordan or kazakhstan or kazakh or kenya or "democratic people's republic of korea" or republic of korea or north korea or south korea or korea or kosovo or kyrgyzstan or kirghizia or kirgizstan or kyrgyz republic or kirghiz or laos or lao pdr or "lao people's democratic republic" or latvia or lebanon or lebanese republic or lesotho or basutoland or liberia or libya or libyan arab jamahiriya or lithuania or macau or macao or "macedonia (republic)" or macedonia or madagascar or malagasy republic or malawi or nyasaland or malaysia or malay federation or malaya federation or maldives or indian ocean islands or indian ocean or mali or malta or micronesia or federated states of micronesia or kiribati or marshall islands or nauru or northern mariana islands or palau or tuvalu or mauritania or mauritius or mexico or moldova or moldovian or mongolia or montenegro or morocco or ifni or mozambique or portuguese east africa or myanmar or burma or namibia or nepal or netherlands antilles or nicaragua or niger or nigeria or oman or muscat or pakistan or panama or papua new guinea or new guinea or paraguay or peru or philippines or philipines or phillipines or phillippines or poland or "polish people's republic" or portugal or portuguese republic or puerto rico or romania or russia or russian federation or ussr or soviet union or union of soviet socialist republics or rwanda or ruanda or samoa or pacific islands or polynesia or samoan islands or navigator island or navigator islands or "sao tome and principe" or saudi arabia or senegal or serbia or seychelles or sierra leone or slovakia or slovak republic or slovenia or melanesia or solomon island or solomon islands or norfolk island or norfolk islands or somalia or south africa or south sudan or sri lanka or ceylon or "saint kitts and nevis" or "st. kitts and nevis" or saint lucia or "st. lucia" or "saint vincent and the grenadines" or saint vincent or "st. vincent" or grenadines or sudan or

suriname or surinam or dutch guiana or netherlands guiana or syria or syrian arab republic or tajikistan or tadjikistan or tadzhikistan or tadzhik or tanzania or tanganyika or thailand or siam or timor leste or east timor or togo or togolese republic or tonga or "trinidad and tobago" or trinidad or tobago or tunisia or turkey or "turkey (republic)" or turkmenistan or turkmen or uganda or ukraine or uruguay or uzbekistan or uzbek or vanuatu or new hebrides or venezuela or vietnam or viet nam or middle east or west bank or gaza or palestine or yemen or yugoslavia or zambia or zimbabwe or northern rhodesia or global south or africa south of the sahara or sub-saharan africa or subsaharan africa or africa, central or central africa or africa, northern or north africa or northern africa or magreb or maghrib or sahara or africa, southern or southern africa or africa, eastern or east africa or eastern africa or africa, western or west africa or western africa or west indies or indian ocean islands or caribbean or central america or latin america or "south and central america" or south america or asia, central or central asia or asia, northern or north asia or northern asia or asia, southeastern or southeastern asia or south eastern asia or southeast asia or south east asia or asia, western or western asia or europe, eastern or east europe or eastern europe or developing country or developing countries or developing nation? or developing population? or developing world or less developed countr* or less developed nation? or less developed population? or less developed world or lesser developed countr* or lesser developed nation? or lesser developed population? or lesser developed world or under developed countr* or under developed nation? or under developed population? or under developed world or underdeveloped countr* or underdeveloped nation? or underdeveloped population? or underdeveloped world or middle income countr* or middle income nation? or middle income population? or low income countr* or low income nation? or low income population? or lower income countr* or lower income nation? or lower income population? or underserved countr* or underserved nation? or underserved population? or underserved world or under served countr* or under served nation? or under served population? or under served world or deprived countr* or deprived nation? or deprived population? or deprived world or poor countr* or poor nation? or poor population? or poor world or poorer countr* or poorer nation? or poorer population? or poorer world or developing econom* or less developed econom* or lesser developed econom* or under developed econom* or underdeveloped econom* or middle income econom* or low income econom* or lower income econom* or low gdp or low gnp or low gross domestic or low gross national or lower gdp or lower gnp or lower gross domestic or lower gross national or lmic or lmics or third world or lami countr* or transitional countr* or emerging economies or emerging nation?).ti,ab,sh,kf. 2013148

26 24 not 25 4345

27 limit 26 to yr="2010 -Current" 2027

Table A. 1 Study quality

Author (year) *Overall rating*	Question and inclusion	Protocol*	Study design	Search*	Study selection	Data extraction	Excluded studies justification*	Included studies details	Risk of bias (RoB)*	Funding	Statistical methods*	RoB: meta-analysis	RoB: individual studies*	Heterogeneity	Publication bias*	Conflict of interest
Mixed AHPs																
Ackerman et al. (2012) *Critically low*	Yes	No	No	Yes	No	No	No	Yes	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	Yes
Baker et al. (2018) *Critically low*	Yes	No	Yes	Yes	No	No	No	Yes	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	Yes
Camden et al. (2020) *Low*	Yes	No	No	Yes	Yes	No	No	Partial Yes	Partial Yes	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	Yes
Dallman et al. (2020) *Critically low*	Yes	No	No	No	Yes	No	No	Partial Yes	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	No
Featherston et al. (2020) *Critically low*	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	Yes
Moran et al. (2014) *Critically low*	Yes	Partial Yes	Yes	Partial Yes	Yes	Yes	No	Partial Yes	No	No	Yes	No	No	No	No	Yes
Nam 2012 *Critically low*	Yes	No	No	Partial Yes	No	No	Partial Yes	Partial Yes	Partial Yes	Yes	No	No	No	No	Yes	Yes
Needle et al. (2011) *Low*	Yes	Partial Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No meta-analysis	No meta-analysis	Yes	Yes	No meta-analysis	No

Author (year) *Overall rating*	Question and inclusion	Protocol*	Study design	Search*	Study selection	Data extraction	Excluded studies justification*	Included studies details	Risk of bias (RoB)*	Funding	Statistical methods*	RoB: meta-analysis	RoB :individual studies*	Heterogeneity	Publication bias*	Conflict of interest
Speyer 2018 *Critically low*	Yes	No	No	Partial Yes	Yes	Yes	Partial Yes	Partial Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Walsh et al. (2020) *Critically low*	No	No	No	Yes	Yes	Yes	No	No	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	No
Moorcroft et al. (2020) *Moderate*	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No meta-analysis	No meta-analysis	Yes	Yes	No meta-analysis	Yes
Occupational Therapists																
Arbesman et al. (2011) *Critically low*	Yes	No	No	Partial Yes	No	No	No	Partial Yes	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	No
D'Amico et al. (2018) *Critically low*	Yes	No	No	Yes	Yes	No	No	Partial Yes	Partial Yes	No	No meta-analysis	No meta-analysis	Yes	Yes	No meta-analysis	No
Désiron et al. (2011) *Moderate*	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	No	No meta-analysis	No meta-analysis	Yes	No	No meta-analysis	Yes
Hand et al. (2020) *Low*	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No meta-analysis	No meta-analysis	Yes	No	No meta-analysis	No
Ikiugu et al. (2017) *Critically low*	Yes	Yes	No	No	No	No	No	No	Partial Yes	No	Yes	Yes	No	Yes	Yes	No
Marshall et al. (2020) *Critically low*	Yes	No	No	Yes	Yes	Yes	No	Partial Yes	No	No	No	No	No	No	No	Yes

Author (year) *Overall rating*	Question and inclusion	Protocol*	Study design	Search*	Study selection	Data extraction	Excluded studies justification*	Included studies details	Risk of bias (RoB)*	Funding	Statistical methods*	RoB: meta-analysis	RoB: individual studies*	Heterogeneity	Publication bias*	Conflict of interest
Roy et al. (2017) *Critically low*	Yes	Partial Yes	No	Yes	Yes	Yes	No	Partial Yes	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	No
White et al. (2020) *Critically low*	Yes	No	No	Yes	No	No	No	Partial Yes	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	No
Dietitians																
Carolan-Ola et al., 2017 *Low*	Yes	No	Yes	Partial Yes	Yes	Yes	Partial Yes	Partial Yes	Yes	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	No
Cherak et al. (2020) *Critically low*	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No meta-analysis	No meta-analysis	No	Yes	No meta-analysis	Yes
King et al. (2014) *Critically low*	Yes	No	No	No	No	No	No	Partial Yes	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	Yes
Maez et al. (2014) *Critically low*	Yes	No	No	Yes	No	No	No	Partial yes	Yes	No	No meta-analysis	No meta-analysis	Yes	No	No meta-analysis	No
McGill et al. (2015) *Moderate*	Yes	Partial Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No meta-analysis	No meta-analysis	Yes	No	No meta-analysis	Yes
Radiographers																
Dennis et al. (2020) *Critically low*	Yes	No	No	Yes	No	No	No	No	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	Yes

Author (year) *Overall rating*	Question and inclusion	Protocol*	Study design	Search*	Study selection	Data extraction	Excluded studies justification*	Included studies details	Risk of bias (RoB)*	Funding	Statistical methods*	RoB: meta-analysis	RoB :individual studies*	Heterogeneity	Publication bias*	Conflict of interest
Miller et al. (2019) *Moderate*	Yes	Partial yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No meta-analysis	No meta-analysis	Yes	Yes	No meta-analysis	No
Van de Venter et al. (2020) *Moderate*	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No meta-analysis	No meta-analysis	Yes	No	No meta-analysis	Yes
Vang 2018 *Critically low*	Yes	No	No	Partial Yes	Yes	Yes	Partial Yes	Yes	No	Yes	No meta-analysis	No meta-analysis	No	No	No meta-analysis	Yes
Art and Music Therapists																
Daykin et al. (2012) *Critically low*	Yes	No	Yes	Partial Yes	No	No	No	Yes	Yes	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	No
Duffy et al.2014 *Moderate*	Yes	No	No	Partial Yes	No	No	No	Partial Yes	Yes	No	No meta-analysis	No meta-analysis	Yes	No	No meta-analysis	Yes
Fancourt et al. (2020) *Critically low*	Yes	No	No	Partial Yes	No	No	No	No	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	No
Uttley et al. (2015) *Moderate*	Yes	Partial Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No meta-analysis	No meta-analysis	Yes	Yes	No meta-analysis	Yes
Physiotherapists																
Flores 2020 *Critically low*	Yes	No	No	No	No	No	No	Partial Yes	No	No	No meta-analysis	No meta-analysis	No	No	No meta-analysis	No

Author (year) Overall rating	Question and inclusion	Protocol*	Study design	Search*	Study selection	Data extraction	Excluded studies justification*	Included studies details	Risk of bias (RoB)*	Funding	Statistical methods*	RoB: meta-analysis	RoB :individual studies*	Heterogeneity	Publication bias*	Conflict of interest
Rathbone 2020 *Low*	Yes	No	Yes	Partial Yes	Yes	Yes	Partial Yes	Partial Yes	Yes	Yes	No meta-analysis	No meta-analysis	Yes	No	No meta-analysis	Yes
Yoshikawa 2020 *Low*	Yes	No	Yes	Partial Yes	Yes	Yes	No	Yes	Yes	Yes	No meta-analysis	No meta-analysis	No	No	No meta-analysis	Yes
Podiatrists																
To et al. (2016) *Moderate*	Yes	Partial yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No meta-analysis	No meta-analysis	Yes	No	No meta-analysis	Yes

Appendix 4: Study characteristics

Table A. 2 Study characteristics

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
Mixed AHPs							
1	Ackerman (2012) *International*	To provide a comprehensive review of research into access to self-management education, conservative management and surgical treatment for arthritis according to specific socioeconomic factors	Systematic review	People with arthritis, specifically osteoarthritis or rheumatoid arthritis across socio-economic groups	N= 28 • 27 observational study • 1 qualitative	Self-management education or conservative treatment, musculoskeletal specialists and allied health services	Access to allied health services
2	Baker (2018) *International*	To synthesise evidence of rehabilitation interventions for depression in post-stroke aphasia and adapt the best evidence within a stepped psychological care framework	Systematic review	People with aphasia after stroke with depression	N= 45 • n= 22 RCT • n= 2 non-randomised controlled trial • n= 5 single participant experimental • n= 9 case series designs • n= 5 mixed methods	Various interventions for depression	Enhanced mood for people with aphasia (preventative, treatment and stroke rehab)
3	Camden (2020) *International*	To describe effectiveness of paediatric telerehabilitation interventions offered to children or their families	Systematic review	Children 0-12 with disabilities or their families	N=23 • n= 19 RCT • n= 4 pilot RCT	Paediatric telerehabilitation	Behavioural functioning, Communication, Mobility, Daily Intake
4	Dallman (2020) *International*	To investigate treatment disparities and differences in allied health services in children with Autism Spectrum Disorder	Systematic Review	Children with Autism Spectrum Disorder	N=19 Study type not reported	Routine provision of allied health services	Health service access and utilisation for children with ASD

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
5	Featherston (2020) *International*	To identify studies that tested whether cognitive, affective or other biases influenced decisions made by allied health care professionals	Scoping review	Any patient population	N=149 • n= 94 published studies (varied designs) • n= 50 doctoral dissertation/thesis (varied designs)	Decision-making on assessment, diagnosis, treatment, prognosis, child placement, school placement, and genetic likelihoods	Cognitive, affective or other bias
6	Moran (2020) *International*	To assess contexts, mechanisms and outcomes of rural clinical placements for AH students	Scoping review	AH students, also non-AH disciplines	N=18 • n= 3 cross-sectional • n= 3 uncontrolled quantitative • n= 2 quasi-qualitative • n= 4 qualitative • descriptive case study • n= 4 mixed methods	Models and mechanisms of clinical placement	Intention to work in rural areas, employment in rural areas, knowledge of rural context, attitude to living and working in rural area
7	Nam (2012) *International*	To evaluate the effectiveness of a culturally tailored diabetes educational intervention (CTDEI) on glycaemic control in ethnic minorities with type 2 diabetes	Systematic review and meta-analysis	Ethnic minorities with type 2 diabetes	N= 12 RCTs	Culturally tailored diabetes educational intervention	Primary outcome HbA1c as a reflection of glycaemic control
8	Needle (2011) *UK*	To evaluate the evidence relating to the current role of UK-based AHPs including optometrists in health promotion	Systematic review	All patient/client groups with reporting data for lower socio-economic groups	N= 141 • n= 63 RCTs • n= 17 controlled clinical trials • n= 47 before and after design N= 14 qualitative	Health education; individual empowerment; community development/ empowerment; structural adjustment	Contribution of health promotion to AHP's work

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
9	Speyer (2018) *International*	To describe telehealth interventions delivered by allied health professionals and nurses in rural and remote areas, and to compare the effects of telehealth interventions with standard face-to-face intervention.	Systematic Review and meta-analysis	Rural and remote populations	N=43 • n=14 describing one group of participants (e.g. case series) • n=29 with two or more groups (e.g. interrupted time series)	Telehealth interventions delivered by allied health professionals and nurse	Effects of telehealth interventions with standard face-to-face interventions.
1	Walsh (2020) *International*	To synthesise international policies encouraging healthcare workers to work in rural and remote communities	Scoping review	People in remote and rural areas	N=51 Study type not reported	Policy initiatives to address workforce maldistribution	Recruitment and retention of healthcare workers
1	Moorcroft (2019) *International*	To synthesize barriers and facilitators to provision and use of low-tech and unaided augmentative and alternative communication (AAC) systems for people with complex communication needs (CCD)	Systematic review	AAC users with complex communication needs with results by socio-economic and cultural group	N= 43 Study type not reported	AAC devices	Identified barriers and facilitators for provision and use of low tech and unaided AAC that may contribute to under-use of AAC systems by people with CCD.
Occupational Therapists							
1	Arbesman (2011) *International*	To evaluate the effectiveness of occupational therapy interventions focusing on participation and performance in occupations related to paid and unpaid employment and education for people with serious mental illness.	Systematic Review	People with serious mental illness (18-65 years)	N=46 • n=37 reviews • n=9 non randomised studies	Occupation and activity based interventions and interventions addressing performance skills, aspects of the environment, activity demands and client factors	Participation and performance in paid and unpaid employment and education

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
1	D'Amico (2018) *International*	To consider effectiveness of occupational therapy for people with serious mental illness	Systematic review	Adults with serious mental illness	N= 61 • n= 39 RCT • n= 6 observational • n= 4 non-randomised trials • n= 1 pre-post single cohorts • n= 11 systematic reviews	Psychoeducation, occupation- and cognitive-based interventions, skills-based interventions, technology-supported interventions	Daily living, social participation, rest and sleep
1	Désiron (2011) *International*	To assess the effect of occupational therapy interventions on return to work	Systematic review	Working age adults	N= 6 • n= 3 RCTs • n= 3 cohort studies	Rehabilitation interventions aiming at facilitating return to work	Return to work, time off work, functional capacity, mental, physical and social wellbeing
1	Hand (2011) *International*	To review the evidence regarding the effectiveness of community-based occupational therapy interventions in improving occupational outcomes for adults with selected chronic diseases	Scoping review	Adult populations with data on employment	N= 16 RCTs	Various including job retention programme	Various, including employment
1	Ikiugu (2017) *International*	To estimate effectiveness of occupational therapy interventions in improving occupational performance among adults with mental health diagnosis	Systematic review and meta-Analysis	Adults with mental health diagnosis	N= 11 RCTs	Theory-based occupational therapy interventions	Occupational performance
1	Marshall (2020) *USA*	To capture range and quality of interventions focused on transition from homelessness to housing	Systematic Review	People experiencing homelessness	N=11 quasi-experimental studies	Integrated group and individual life skills interventions, group-based life	Development of life skills

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
						skills interventions and psychological and consultative interventions	
1	Roy (2017) *International*	To identify practices that enable or support occupation of people experiencing or at risk of homelessness	Scoping review	Adults experiencing or at risk of homelessness	N= 178 • n= 15 experimental uncontrolled • n= 9 experimental controlled • n= 154 descriptive	Occupational performance skills training, enrichment of occupational repertoire, , provision of physical rehabilitation services, child and family services, and community building.	Occupational performance skills, Employment, Education, Transition into housing, Literacy
1	White (2020) *International*	To explore how occupational therapists can improve their work with Indigenous peoples	Integrative review	Indigenous people	N= 25 • n= 10 empirical • n= 15 non-empirical	Routine provision of occupational therapy services	Service use, communication and building relationships, unsuitable tools and concepts, knowledge through collaboration, and the underlying assumptions of occupational therapy.
	Dietitians						
2	Carolan-Olah (2017) *USA*	To critically examine existing gestational diabetes mellitus (GDM)	Systematic Review	Pregnant women who identified as Hispanic,	N=7 • n=5 RCTs • n=2 cohort studies	GDM interventions based on diet and exercise, diet-only,	Blood glucose levels; however other measures such as

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
		programs for Hispanic women of Mexican origin		Mexican, Mexican American; were aged over 18 years and diagnosed with or at high risk of GDM		diet and insulin/metformin	glycosylated haemoglobin levels, GDM diagnosis, diet quality and perinatal/neonatal outcomes were also examined
2	Cherak (2020) *International*	To map the concepts and types of evidence that exist on nutrition intervention for various mental disorders	Scoping review	Adults with mental health problems	N= 69 • n= 55 double blind trials • n= 6 single-blind trial • n= 5 open-label RCTs	Nutrition counselling and/or modification to the diet, including whole diet, and/or use of food(s) and or a nutrient supplement	Mental health
2	King (2014) *International*	To present results of studies focused on community-based nutrition interventions for adults with disabilities	Scoping review	Adults with disabilities	N= 16 • n= 10 quasi-experimental • n= 3 quasi experimental with comparator • n=3 other	Education, behavioural/skill training	Weight loss, Body Mass Index and improved health behaviours
2	Maez (2014) *International*	To identify the best evidence-based strategies directed towards improving diabetic outcomes of rural populations by reducing HbA1C.	Integrative review	Adults with diabetes in rural, outpatient settings	N= 16 • n= 6 RCTs • n= 1 experimental pre- and post-study • n= 7 quasi-experimental/pre-experimental studies • n= 2 non-experimental/qualitative/meta-synthesis	Lifestyle modification, motivational counselling, nutritional education for patients, and provider education.	Reduced HbA1C
2	McGill (2015) *International*	To identify whether the impacts of interventions promoting healthy eating	Systematic review	Healthy populations (any age or	N= 36 • n= 18 "Price" interventions • n= 6 "Place" interventions	Interventions to promote healthy eating	Dietary intake

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
		differ by socioeconomic position (SEP).		gender), from any country	• n= 1 "Prescriptive" interventions • n= 4 "Promotion" interventions • n= 18 "Person" interventions		

Radiographers

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
2	Dennis (2020) *International*	To highlight the experiences of notable rapid access programmes and describe the meaningful direct and indirect impacts they have had on the practice of palliative radiotherapy.	Narrative review	Oncology patients (advanced and metastatic cancers) with discussion on vulnerable populations	N= 19 Study design not reported	Patient assessments, treatment planning and delivery of radiotherapy	Access to and use of radiotherapy
2	Miller (2019) *USA*	To understand the barriers to mammography screening experienced by ethnic and racial minority women; to understand the similarities/differences in barriers experienced by different groups; to understand what methodological considerations are important when assessing barriers among racial/ethnic minority women	Systematic review	Racial and ethnic minority women	N= 28 • n= 22 qualitative • n= 6 quantitative	Mammography use or breast cancer screening	Mammography/ breast screening uptake
2	Van de Venter (2020)	To establish the current evidence available on strategies that can	Integrative review	Sexual and gender minority patients	N= 4 • n= 1 clinical perspective/opinion	Providing inclusive medical imaging environments for	Inclusive care and care environments

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
	International	be and are used to foster inclusive medical imaging environments for sexual and gender minority patient groups and radiographers			• n= 1 qualitative • n= 1 short report (opinion) • n= 1 editorial	sexual and gender minority patients	
2	Vang (2018) *USA*	To describe the scope and impact of mobile mammography programs in promoting mammographic screening participation among medically underserved women	Systematic Review	Underserved women	N= 11 • n=4 retrospective chart reviews • n=4 cross-sectional surveys	Screening mammography	Screening participation among underserved women
	Art and Music Therapists						
2	Daykin (2012) *International*	To contribute to the evidence base on the impact of music making on the health, well- being and behaviour of young offenders and those considered at risk of offending	Systematic Review	Adolescent and young offenders/ at risk of offending	N= 11 • n= 5 qualitative • n= 6 quantitative	Performance, playing instruments and exploring rap lyrics	Improved confidence, self-esteem, self-concept, education/work performance, dyslexia, interpersonal relationships, social skills, mental well-being, emotion, mood and anger
3	Duffy (2014) *International*	To examine: (i) the extent to which victims of intimate partner abuse (IPA) use complementary and alternative medicine (CAM)	Scoping review	Intimate partner abuse (IPA) victim	N= 3 Study design not reported	Music therapy	Effects of music therapy on the mental health of people who have experienced IPA

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
		and (ii) the effects of CAM on their mental health.					
3	Fancourt (2020) *International with a focus on WHO European region*	To synthesize the global evidence on the role of the arts in improving health and well-being, with a specific focus on the WHO European Region	Scoping review	Pregnant & post-natal women; adolescents; patients with severe mental illness; patients with eating disorders; adults who have experienced trauma	N= >900 • n= >200 reviews • n= 700 individual studies	Focused primarily on art therapy	Improving psycho-social well-being physical and mental health.
3	Uttley (2015) *International*	To evaluate evidence for the clinical effectiveness and cost-effectiveness of art therapy for non-psychotic mental health disorders	Quantitative systematic review & Qualitative Review	Populations with non-psychotic mental health disorders	N= 27 • n= 15 RCTs • n= 12 cohort studies	Art therapy as delivered by the NHS	Treatment effectiveness; response as determined by changes in mental health rating scales
	Physiotherapists						
3	Flores (2020) *USA*	To describe the literature on healthcare disparities for Hispanic patients in the field of physical medicine and rehabilitation.	Narrative review	Hispanic and/or Latino populations	N= 49 • n=45 retrospective • n=4 prospective	Physical medicine and rehabilitation	Healthcare disparities the field of physical medicine and rehabilitation
3	Rathbone (2020) *International*	To determine if and how sex and gender have been incorporated into low back pain (LBP) clinical practice guidelines (CPG), and if	Scoping review	Adult population (18 years or older) with primary LBP	N=36 Clinical Practise Guidelines (CPGs)	Low back pain (LBP)	How sex and gender had been incorporated into healthcare

	Author (year) *Countries of studies*	Aim	Study design	Target population	N studies reviewed and type/design	Care or intervention provided	Outcome
		sex and gender terms have been used properly.					recommendations within CPGs.
3	Yoshikawa (2020) *International*	To synthesise the sociocultural factors influencing pain management between CALD patients with persistent pain and physiotherapists treating CALD patients.	Scoping review	Adults (>18 years) with persistent pain and/or their immediate family members.	N=16 • n=11 qualitative • n=5 quantitative	Physiotherapy management	Clinical interactions between physiotherapists and patients with persistent pain
	Podiatrists						
3	To (2016) *International*	To summarize current published literature related to foot conditions and associated interventions among homeless persons.	Systematic review	People who are homeless	N= 17 • n= 16 observational descriptive • n= 1 intervention (non-RCT)	Foot assessment – participant questionnaire, clinical foot assessment and/or retrospective chart review of health clinics serving homeless individuals	Foot health outcomes – self-reported survey of foot health, attendance at pre-travel clinic, participants' foot concerns over time, effect of medical treatment on diabetic foot ulcers

Appendix 5: Reviews' key findings

Table A. 3 Review's key findings

	Author (year)	Summary of review	Main findings
Mixed AHPs			
1.	Ackerman (2012)	Systematic review investigating access to self-management education and conservative management for people with arthritis according to socioeconomic status	1. Lower education was associated with greater self-perceived need for therapies. However, levels of education were associated with reduced help-seeking and receipt of advice (including weight loss), physical therapy and other allied health services. 2. Lower socioeconomic status was also associated with lower healthcare use and reduced access to care/services. 3. There is evidence to suggest there is under-provision of health services in low SES areas – when controlled for, association between SES and reduced access to care remains.
2.	Baker (2018)	Systematic review of rehabilitation interventions to prevent and treat depression in post-stroke aphasia	1. People with aphasia (PWA) with mild depression may benefit from psychosocial-type treatments. 2. PWA without clinically significant depression may experience benefits to mood through participation in a range of interventions. 3. Unclear which interventions may prevent depression for PWA. 4. No evidence found for treatment of moderate to severe aphasia; specialist mental health or behaviour services required for this group. 5. PWA commonly excluded from studies
3.	Camden (2020)	Review of effectiveness of paediatric telerehabilitation interventions for children with disabilities and their families	1. Majority of outcomes improved after telerehabilitation. 2. Characteristics of effective interventions: focused on parents, centred around an exercise program, used coaching approach, focused on improving child's behavioural functioning, lasted more than 8 weeks and were offered at least once a week
4.	Dallman (2020)	Systematic review of impact of treatment disparities and differences in health service access and utilisation for children with ASD	1. Older children, those with less severe autism spectrum disorder, those from minority groups and those from particular geographic regions are less like to receive AH services. 2. Families of children with ASD often need more services and it is important to identify barriers to access. 3. Severity of ASD symptoms, age of child, parental income and education level, all impact on likelihood to access health services. 4. Larger national studies around race and ethnicity are needed, as it was not shown to have consistent impact in present review.
5.	Featherston (2020)	Systematic scoping review synthesising studies that	1. There was also a broad range of cognitive, affective and other biases identified to be influential to AHP decision making: stereotyping (sex/gender or sex roles; race/ethnicity; socioeconomic

		tested whether cognitive, affective or other biases influenced decisions made by allied health care□ professionals	status/class; age; sexual orientation, health status; mental health; weight; speech intelligibility; drug use; type of child maltreatment in relation to child protection reports). 2. Other biases included anchoring; confirmation bias; diagnostic overshadowing; labelling bias. 3. There were similarities in decision making processes identified (through hypothetical clinical scenarios/vignettes) across AHPs, which indicates that bias would place an important role in decision-making outcomes including in treatment recommendations or prognoses. The presence of bias could make decision-making and outcomes inconsistent, and therefore could have a likely negative overall effect on the quality of decision-making.
6.	Moran (2020)	Review of factors influencing success of rural clinical placements	1. Strong relationship between providing AH students with skills *and* training in rural environments have shown improvements in interprofessional competence and increases in number of student placement opportunities. 2. When unmet needs of community are driver for rural clinical placement, there is increased service delivery to 'in-need' communities and increased placement capacity
7.	Nam (2012)	Systematic review and meta-analysis valuating the effectiveness of a culturally tailored diabetes educational intervention (CTDEI) on glycemic control in ethnic minorities with type 2 diabetes.	7. CTDEI is effective for improving glycaemic control among ethnic minorities. 7. The magnitude of effect varies based on the settings of intervention, baseline HbA1c level, and time of HbA1c measurement.
8.	Needle (2011)	Systematic review to evaluate the evidence relating to the current role of UK-based AHPs including optometrists in HP	1. In terms of age groups, the overwhelming majority (64%) of interventions targeted adults, followed by older people (15%), children (11%) and adolescents (8%). 84% of interventions targeted both males and females, 9% just females and just 2% males (the remainder failed to specify). 2. Of the other demographic or lifestyle variables that might be expected to influence message or advice giving, only ethnicity was referred to, and then by only two studies (<1%). Indeed, ethnicity was a ground for exclusion (non-availability of minority language-speaking staff) more often than it was a ground for specific targeting. 3. Interventions were blind to social class, religion and sexuality, to the extent that these were seldom mentioned even in descriptions of intervention settings. 4. Almost all of these people (89%) had a pre-existing condition. The major conditions targeted were: musculoskeletal conditions (28%), cancers (20%), obesity (11%), diabetes (10%), speech/language/swallowing disorders and mental health (both 9%) and stroke/cardiovascular (8%). 5. 62% of interventions were at Tertiary, 40% at Secondary, 8% at Primary and 3% at Quaternary level. 6. The approach was overwhelmingly individualistic, with individual empowerment (75%) and education (57%) predominating. Community development interventions were uncommon (1%). Small group working (45%) just exceeded one-to-one delivery (44%). However, group working was

			generally adopted for reasons of administrative convenience or efficiency. Rarely was it an integral component of the intervention (e.g. to reduce social isolation or stigma). 7. HP is a routine component of AHP practice. In the best interventions, it was rigorously theorised, systematically developed and delivered, and robustly evaluated. Generally, however, theorisation was weak (or more often altogether lacking), and interventions appeared to be poorly planned, unsystematically delivered, and were weakly evaluated. 8. At present, although HP is a standard component of everyday AHP practice, it seems to be largely taken-for-granted. 9. The evidence points also towards significant variation between professions. Physiotherapists and dietitians appeared to have better developed research capacity than other AHPs. Approaches to HP, evaluation and research also appeared to vary, with dietetics and physiotherapy subscribing to a biomedical model, and occupational therapy and arts therapies to a social science model.
9.	Speyer 2018	Systematic review and meta-analysis describing telehealth interventions delivered by allied health professionals and nurses in rural and remote areas, and to compare the effects of telehealth interventions with standard face-to-face interventions.	1. Meta-analysis results slightly favoured telehealth interventions compared with face-to-face interventions, but did not show significant differences. 2. There were significant differences for interventions using a combination of cognitive and physical approaches between telehealth and standard treatment, with a moderate effect favouring telehealth-delivered interventions
10.	Walsh (2020)	Review of national policies that impact allied health workforce maldistribution	1. Training in rural and remote settings is important to attract graduates to practice in these areas 2. Financial incentives may positively impact rural recruitment and retention 3. Importance of personal and professional support in recruiting rural health professionals
11.	Moorcroft (2019)	Systematic review of barriers and facilitators to provision and use of low-tech and unaided AAC for people with complex communication needs	1. Many barriers were environmental (attitudes/support by professionals, family members and society) and as such have potential to be influenced by clinicians, services and funding bodies. 2. Socio-economic barriers included affordability, home environment and frequently moving schools, culture barriers were language and cultural differences
	Occupational therapists		
12.	Arbesman, (2011)	Systematic review exploring the effectiveness of occupational therapy	1. The results indicate that strong evidence exists for the effectiveness of supported employment using individual placement and support to result in competitive employment. 2. These outcomes are stronger when combined with cognitive or social skills training.

		interventions focusing on participation and performance in occupations related to paid and unpaid employment and education for people with serious mental illness	3. Supported education programs emphasizing goal setting, skill development, and cognitive training result in increased participation in educational pursuits. 4. The evidence for instrumental activities of daily living interventions that targeted specific homemaking occupations and supported parenting was limited but positive.
13.	D'Amico (2018)	Review of interventions addressing occupational performance for people with serious mental illness	1. Support for using evidence-based practice within occupational therapy 2. Consideration for occupational therapy practitioners to be mental health service providers 3. Instead of general expectations, occupation-based interventions focused on client centred goals have better outcomes.
14.	Désiron (2011)	Systematic review investigating the effects of occupational therapy interventions in vocational rehabilitation on return to work (including specific aspects of occupational therapy contributing to these)	1. Occupational therapy interventions impacted return to work. Specifically reducing average self-reported sick days, functional restoration to resolve issues associated with perceived disability and employment status. Pain and depression were not found to be positively impacted by occupational therapy interventions. 2. Rehabilitation programmes were heterogeneous, thereby making it challenging to identify mechanisms of action/active ingredients for occupational therapy specifically 3. Occupational therapy interventions were usually situated within a multidisciplinary team delivering a programme, thus it was not possible to identify the distinct impacts of occupational therapists on return to work.
15.	Hand (2011)	Scoping review investigating the effectiveness of community-based occupational therapy interventions	1. Four studies examined participation in work as an outcome, but only 1 found improvement in the intervention group compared with control participants. This study involved occupational therapy focused on work reintegration for adults with major depression; compared with the control group, the intervention group resumed work more quickly 2. Interventions that involve occupational therapy can enhance basic and instrumental activities of daily living in adults with COPD, rheumatoid arthritis or multiple conditions, as well as with depression. The impact on physical function is inconclusive.
16.	Ikiugu (2017)	Meta-analysis of occupational therapy interventions among adults with mental health diagnosis	1. Theory based occupational therapy interventions may be effective in improving occupational performance for those with mental health diagnosis. 2. Therapy had a small effect on improving well-being among people with mental health diagnosis. 3. Such interventions should be a feature of rehabilitation services
17.	Marshall (2020)	Systematic review to assess range and quality of interventions aimed at supporting transition from homelessness	1. Interventions to support formerly homeless people in participating in activities that are meaningful are just as important as independent living skills. 2. Occupational therapy lens may be useful in overcoming barriers to inclusion in mainstream society. 3. Opportunities for occupational therapists to further support formerly homeless people once housed.

18.	Roy (2017)	Review of practices impacting occupations of people experiencing homelessness	1. Occupational therapists can facilitate occupational engagement of people experiencing homelessness. 2. There are gaps in knowledge including family homelessness in Canadian context and cultural humility
19.	White (2020)	Review of practices to improve Occupational Therapy work with Indigenous Peoples	1. Occupational therapists should engage with implicit assumptions within their profession and how it influences their practice. 2. Therapists should listen to Indigenous clients and exchange knowledge with them 3. Therapists should make use of Indigenous health workers and community leaders for better follow up opportunities and better access to individuals 4. Indigenous communities should determine priorities and outcomes that are directly beneficial to them.

Dietitians

20.	Carolan-Olah 2017	Critical systematic review of GDM intervention programs for Hispanic women, in the United States of America (US).	1. Intensive nutritional counselling approaches which promote low calorie/low GI diets appear to be most effective in BGL management in this population. 2. Interventions that are delivered in Spanish and culturally tailored may be more acceptable to participants.
21.	Cherak (2020)	Scoping review to map the concepts and types of evidence that exist on nutrition intervention for various mental disorders	1. 11 out of 15 trials which assessed and implemented nutrition interventions to improved dietary patterns reported statistically significant and clinically important positive effects of nutrition interventions on mental disorders. 2. The majority of the trials (n=61) investigated supplementation, most commonly adding essential fatty acids, vitamins or minerals. The majority reported either statistically significant or clinically important effect and 51% reported both. 3. Trials were heterogeneous for targeted mental disorders, nutrition interventions and outcome assessed.
22.	King (2014)	Review of interventions improving nutritional health of adults with disabilities	1. Majority of interventions resulted in improved health behaviours e.g. eating habits and more physical activity 2. Although, knowledge gained by participants varied across studies. 3. Common barriers like budgeting, grocery shopping and cooking techniques should also be addressed in this population

23.	Maez (2014)	Integrative review of strategies directed towards improving diabetic outcomes of rural populations by reducing HbA1C.	1. Four key intervention types were identified to reduce HbA1c:
			  1. Lifestyle modifications including smoking cessation and exercise/physical activity – important to provide information using varied formats (e.g. video, verbal explanation, written material) particularly for rural populations where there are high illiteracy levels
			  2. Motivational counselling – needs to be consistent and include follow-up in order to be successful

			3. Nutritional education for patients – education on portion sizes and healthy alternative cooking methods to encourage a structured approach to diet, providing information about diabetes indicators, and using goal setting were important for success 4. Education for providers – educating providers on guidelines for diabetes care and management, having a diabetes registry and system for healthcare delivery were important for patient management
24.	McGill (2015)	Systematic review of interventions to promote healthy eating to identify whether impacts differ by socioeconomic position (SEP).	1. "Price" interventions were most effective in groups with lower SEP, and may therefore appear likely to reduce inequalities. 2. All interventions that combined taxes and subsidies consistently decreased inequalities. 3. Interventions categorised as "Person" had a greater impact with increasing SEP, and may therefore appear likely to reduce inequalities. 4. All four dietary counselling interventions appear likely to widen inequalities. 5. "Place" interventions were not judged as likely to widen inequalities.

Radiographers

25.	Dennis (2020)	Narrative review describing notable rapid access programmes and their impacts on palliative radiotherapy for patients with advanced and metastatic cancers	1. Older people and those in rural areas less likely to access radiotherapy 2. Nineteen rapid access programmes across 8 countries (Canada, India, Italy, New Zealand, Australia, USA, UK, Ireland) which focussed on clinical assessment and treatment delivery (usually a course of single fraction) 3. Rapid access programmes can beneficial particularly for those living in remote communities, in hospice or inpatient settings, or those with advanced age
26.	Miller (2019)	Narrative review describing the barriers to mammography and breast cancer screening uptake in women from racial and ethnic minority backgrounds	1. Various barriers to mammography/breast cancer screening were identified and organised into the following categories: psychological/knowledge-related, logistical, cultural/immigration-related, and social/interpersonal. 2. African American/Black; Asian/Pacific Islander and Hispanic women reported negative attitudes from healthcare providers (including rudeness) and a lack of provider communication as a common barrier to mammogram/breast cancer screening uptake. Insensitivity to cultural modesty was also identified as a barrier by some but not all groups (e.g. Native American; Middle Eastern). 3. Quantitative studies showed that lack of doctor referral was a key barrier for several groups. Women also reported not being treated with respect by technicians.
27.	Van de Venter (2020)	Integrative review of strategies for fostering inclusive medical imaging environments for sexual and gender minority patient groups and radiographers	Three themes identified: 1) Using inclusive language is important for creating inclusive health care environments for gender minority patients, e.g. using intake forms that ask for a patient's sex, identity, gender and expression, preferred pronouns, and other diversity characteristics, to facilitate non-judgemental interaction between patients and radiographers 2) Educating radiographers is critical to empower radiographers (pre- and post-qualifying) about addressing sexual and gender minority patients' needs, preferences and expectations.

			3) Creating affirming health care environments can contribute to fostering an inclusive medical imaging environment
28.	Vang 2018	Systematic review researching the scope and impact of mobile mammography programs in promoting mammographic screening participation among medically underserved women.	1. Mobile mammography clinics may be effective at reaching medically underserved women. 2. Adding patient navigation to mobile mammography programs may promote attendance at mobile sites and increase follow-up adherence. 3. Efforts to promote mammographic screening should target women from racial/ethnic minority groups, women from low-income households, and uninsured women.

Art and Music Therapists

29.	Daykin (2012)	Systematic review on the impact of music making n the health, well-being and behaviour of young offenders and those considered at risk of offending.	1. Music making may be an important tool for the promotion of health and the prevention of offending in young people. 2. The impact of music making may be contingent upon the extent of 'ownership' felt by the young people taking part. 3. The impact of music making on young people in justice contexts may be limited by adherence to individualistic notions of creativity, emphasis on deviant biographies and behaviours, and detraction from wider questions of history, identity and resistance. 4. Successful interventions may allow young people to safely express their hopes, dreams and frustrations, and thereby offer a means of coping and asserting control over life.
30.	Duffy 2014	Scoping review examining the use and effectiveness of complementary and alternative medicine (CAM) among victims of IPA.	1. The review found little evidence for the benefits of CAM for IPA victims. 2. Findings suggest positive effects of music therapy and yogic breathing; however, methodological limitations mean that these results should be interpreted with caution.
31.	Fancourt (2020)	Scoping review of the global evidence on the role of the arts in improving health and well-being, with a specific focus on the WHO European region	1. Art therapy reduces symptoms of anxiety and depression among pregnant women. 2. Music therapy improves mood for mothers with post-partum psychosis. 3. Music and dance therapies reduce symptoms of depression and anxiety among adolescents and improve individual and social well-being. 4. Music therapy improves symptoms for people with sleeping disorders. 5. Art therapy improves symptoms for people with severe mental illness in inpatient settings. 6. Art therapy improves the well-being of people with eating disorders. 7. Art therapy improves the well-being of people who have experienced trauma.
32.	Uttley (2015)	Systematic Quantitative Review & Qualitative Review of art therapy for	1. Art therapy appears to have statistically significant positive effects compared with control in a number of studies in patients with different clinical profiles

		people with non-psychotic mental disorders	2. Art therapy was reported to be an acceptable treatment and was associated with a number of benefits. A small number of patients reported varying reasons for not wanting to take part and, therefore, art therapy may not be a preferred treatment option for everyone. 3. Art therapy appears to be cost-effective versus wait-list, but confirmatory studies are needed to confirm this finding, as well as evidence to inform future cost-effective analyses of art therapy versus other treatments.
Physiotherapists			
33.	Flores 2020	Narrative review describing healthcare disparities for Hispanic patients in the field of physical medicine and rehabilitation.	1. Disparities across common conditions and injuries in the physical medicine and rehabilitation literature, including poststroke rehabilitation, hip fracture treatment and rehabilitation, spinal cord injury, and traumatic brain injury exist for Hispanic patients. 2. Hispanic patients may be at risk for worse outcomes after these conditions, because of low access to rehabilitation services and disparities in the referral process. 3. Similar results are reported for pain management and Parkinson disease
34.	Rathbone 2020	Scoping review exploring how sex and gender have been incorporated into low back pain (LBP) clinical practice guidelines (CPG).	1. CPGs did not consistently consider sex and gender differences in assessment, diagnosis or treatment of LBP. 2. Overall, there was no observable relationship between guideline quality and likeliness of integrating sex or gender terms. 3. When it was considered, sex and gender terms were used interchangeably, and considerations were primarily regarding pregnancy.
35.	Yoshikawa 2020	Scoping review synthesizing information on the sociocultural factors influencing pain management between CALD patients with persistent pain and physiotherapists treating CALD patient.	1. Discordant perspectives on causation, pain management approaches, and patient autonomy in management are evident between CALD patients and physiotherapists. 2. Discordance may create stress in the therapeutic alliance and undermines the efficacy of pain management interventions. 3. Physiotherapy should foster cultural competence and equip physiotherapists with opportunities to maximise their sociocultural awareness, knowledge and skill practising physiotherapy in cultural plural societies.
Podiatrists			
36.	To (2016)	Systematic review summarising published literature concerning foot conditions and interventions associated with people who are homeless	1. Foot conditions/pathologies are prevalent in people who experience homelessness. 2. Limited evidence exists for the effectiveness of interventions addressing foot conditions/pathologies (n= 1 in this review, not a clinical trial). This interventional study (n= 930 homeless individuals) were treated with removal of necrotic tissue, incision and drainage of infected areas/abscesses, wound care, antibiotics and analgesics as needed on a weekly basis by mobile health services, on average, over a period of 17.6 ± 12 months. This study found improvement in 86% of participants, suggesting intervention effectiveness.

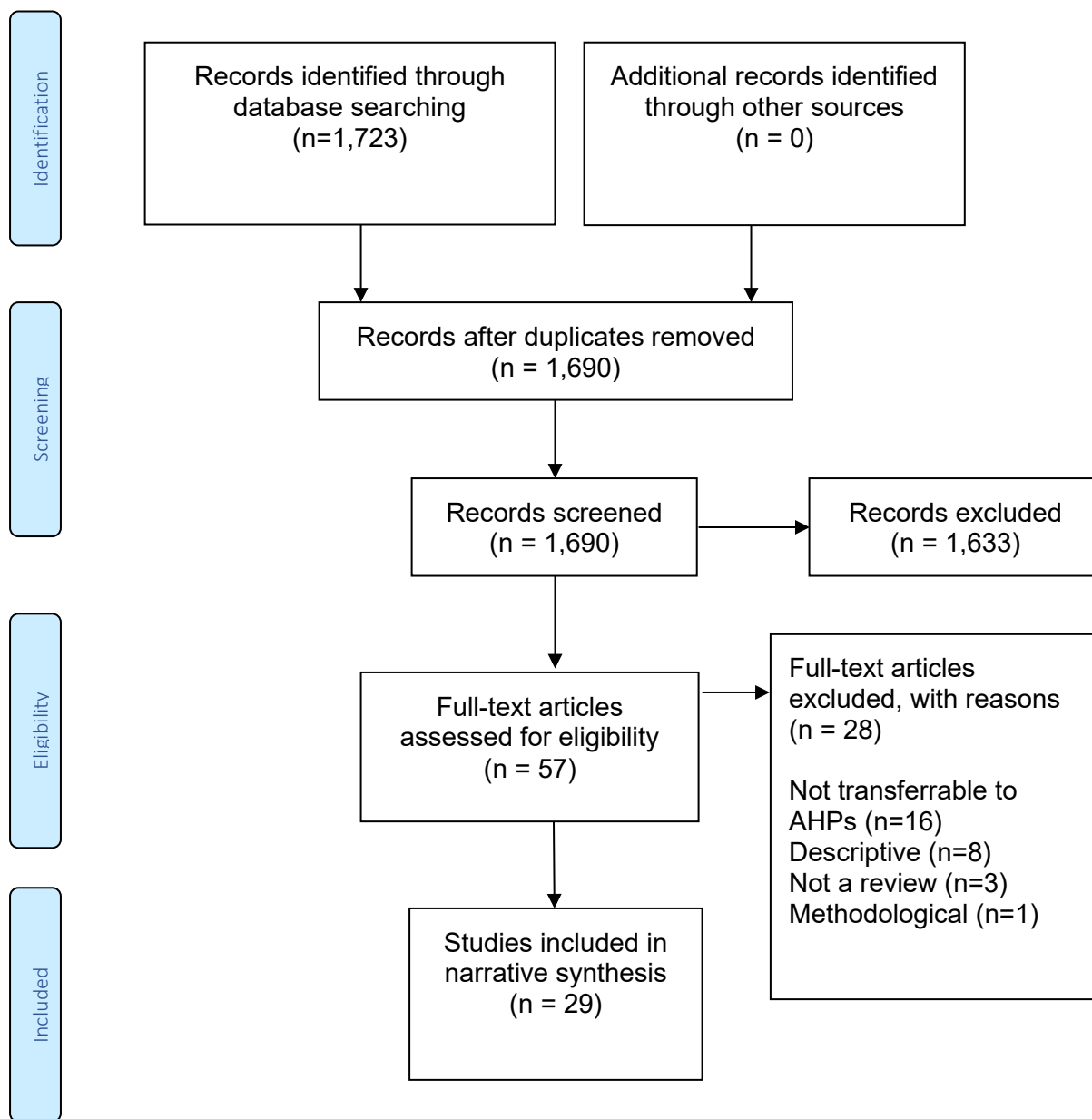|			3. Access to foot care is suboptimal, with several studies showing that <50% of homeless people do not access services even if they needed them. Enhancing access to foot care could help to address mobility, function and hygiene issues, and could offer an opportunity to address other unmet health and social care needs.

Appendix 5: Stage 2 search flow diagram

Figure A. 1 Stage 2 search flow diagram