

# **Appendix F**

## **Pharmaceutical Needs Across the Life-course**

## Potential Pharmaceutical Needs Across the Life-course and the Development of Pharmacy Services

### Part 1 - All Ages

The public health issues of dental health and healthy weight extend right across the life-course.

Everyone will experience minor illness at some time of their life, and the pharmacy has been promoted as the 'first port of call'.

A long-term condition may be diagnosed at any age; although more prevalent in later life, the effects are profound on individuals and families at any stage of life.

Sadly, some conditions in childhood may also be life-limiting and so end-of-life care should also be a priority across the life-course.

Age group	Need	Relevant Pharmacy Service/s
All ages	Dental health	<ul style="list-style-type: none"> <li>• Sale of dental health aids e.g. toothpaste, floss, mouthwash</li> <li>• Advice about sugar-free medicines</li> </ul>
	Management of long-term conditions	<ul style="list-style-type: none"> <li>• Screening services</li> <li>• Medicines Use Review</li> <li>• New Medicines Service</li> <li>• Prescription intervention</li> <li>• Condition-specific services e.g. inhaler technique</li> <li>• Independent prescribing</li> <li>• Deprescribing</li> <li>• Repeat dispensing service</li> <li>• Influenza vaccination</li> <li>• Transfer of care between settings</li> </ul>
	Treatment of minor ailments	<ul style="list-style-type: none"> <li>• Minor ailments services</li> <li>• Sale of non-prescription medicines</li> </ul>
	Healthy weight	<ul style="list-style-type: none"> <li>• Weight management</li> </ul>
	End of life care	<ul style="list-style-type: none"> <li>• Palliative therapy services</li> </ul>

## Part 2 - Pre-Conception & Pregnancy

Possibly the first time that a previously healthy young woman has interacted with the health services. An anxious time where fertility or an unplanned pregnancy may equally be the issue. A crucial time for making connections and supporting new parents (mothers and fathers). Parental health behaviours have a profound effect on their children (e.g. research on smoking).

There is some research to suggest that once a young woman becomes pregnant, less attention is paid to future unsafe sex and the risk of STI transmission so these are important ongoing messages. The risk of a further quick unplanned pregnancy is also there, so ongoing contraceptive needs should be assessed if this is not desired.

Pregnancy in the context of a long-term condition, especially where potentially teratogenic medicines are being taken (e.g. epilepsies), need specialist advice and the pharmacist can make that link.

Pharmacies sell many pregnancy and early childhood-linked products, so there are many opportunities for contact about broader health issues.

Age group	Need	Relevant Pharmacy Service/s
Pre-conception and Pregnancy	Pre-conception health	<ul style="list-style-type: none"><li>• Sale of folic acid</li><li>• Weight management</li><li>• Alcohol IBA / referral to services</li><li>• Smoking cessation</li><li>• Advice for drug misusers – referral to specialist services</li><li>• STI testing</li></ul>
	Pregnancy confirmation	<ul style="list-style-type: none"><li>• Sale of pregnancy tests</li><li>• Pregnancy test service</li><li>• Referral to midwife</li><li>• STI testing</li></ul>
	Effects of long-term medicines taken by the mother	<ul style="list-style-type: none"><li>• Clinical medication review</li><li>• Medicines Use Review</li><li>• New Medicines Service</li><li>• Prescription Intervention</li><li>• Advice for drug misusers – referral to specialist services and supervised consumption</li></ul>
	Vaccination (e.g. whooping cough, influenza)	<ul style="list-style-type: none"><li>• Vaccination services</li></ul>
	Birth planning	<ul style="list-style-type: none"><li>• Hire of TENS machines</li><li>• Sale of complementary therapies</li><li>• Signposting to antenatal classes</li></ul>

### Part 3 - Childhood (Birth – 11 years)

An anxious time for new parents. Self-medication for minor ailments, and distinguishing between the minor and major is a new and onerous task. Research has shown that parents can be vague about the correct dosage of basic children's medicines like paracetamol, and that they may not engage with dosage changes as the child grows. Dosing for children who were premature babies should also be calculated carefully.

Having a child diagnosed early with a long-term condition is also stressful, and support from the pharmacist could be appreciated alongside specialist care.

Early health behaviours could set a pattern for life, so healthy teeth and healthy weight are good areas of discussion during this stage.

There is an intensive vaccination schedule associated with childhood, and pharmacy may be able to provide information and encourage uptake.

Parental mental and physical health should also be monitored as the relationship allows.

Pharmacies sell many early childhood-linked products, so there are many opportunities for contact about broader health issues.

Age group	Need	Relevant Pharmacy Service/s		Need across Childhood	Relevant Pharmacy Service/s
<b>Birth-12 months</b>	Breastfeeding / Nutrition	<ul style="list-style-type: none"> <li>• Infant feeding and weaning advice</li> <li>• Sale of infant formula</li> <li>• Sale of treatments for breastfeeding side-effects</li> <li>• Signposting to groups and advice</li> </ul>		Accidental injury	<ul style="list-style-type: none"> <li>• Medicines disposal</li> <li>• Needle exchange</li> <li>• Sale of child safety aids</li> <li>• Minor ailments services</li> <li>• Sale of non-prescription medicines</li> </ul>
	Infant deaths / Stillbirth	<ul style="list-style-type: none"> <li>• Minor ailments service</li> <li>• Advice about SIDS (sleeping position, smoking)</li> </ul>		Family Smoking	<ul style="list-style-type: none"> <li>• Smoking cessation</li> </ul>
	Prematurity	<ul style="list-style-type: none"> <li>• Advice on medicines use in pre-term babies, including non-prescription medicines</li> </ul>		Growth and Development	<ul style="list-style-type: none"> <li>• Signposting to advice</li> </ul>
	Contraceptive advice for mother	<ul style="list-style-type: none"> <li>• Emergency contraception</li> <li>• Contraception advice</li> <li>• Sale of condoms</li> </ul>		Healthy weight (parents)	<ul style="list-style-type: none"> <li>• Weight management</li> </ul>
	Parental mental health (e.g. postnatal depression)	<ul style="list-style-type: none"> <li>• Signposting from sale of relevant non-prescription medicines (sleep aids, complementary therapies)</li> <li>• Referral to specialist services</li> </ul>		Parenting support	<ul style="list-style-type: none"> <li>• Signposting to community resources</li> <li>• Advice about non-prescription medicines</li> </ul>
<b>Preschool Up to 5 years</b>	Sports injuries	<ul style="list-style-type: none"> <li>• Minor ailments services</li> <li>• Sale of non-prescription medicines</li> </ul>		Vaccination	<ul style="list-style-type: none"> <li>• Influenza vaccination services</li> <li>• Timely boosters</li> <li>• Signposting</li> </ul>
<b>Primary School 5-11 years</b>	Sports injuries	<ul style="list-style-type: none"> <li>• Minor ailments services</li> <li>• Sale of non-prescription medicines</li> </ul>			

## Part 4 – Adolescence and Adulthood (12-59 years)

Adolescence – the gateway to healthy adulthood - most young people thrive and take on adult responsibilities but some have more health service needs due to:

- Unintentional Injury (principally road traffic accidents)
- Diagnosis of a long-term condition
- Development/emergence of a mental health problem
- Adoption of health risk behaviours (which often cluster) e.g. smoking, alcohol use, unsafe sex

Young Adulthood – major transitions into work, new relationships and parenthood – but more young adults now stay with parents for longer, and adolescence may be prolonged

Middle Adulthood – consolidation of families, new parenting challenges as children move through adolescence and young adulthood, and middle adult's own health risk behaviours or hereditary risk factors may start to manifest in long-term conditions e.g. high cholesterol, smoking-related disease, hypertension

Age group	Need	Relevant Pharmacy Service/s		Need across Adulthood	Relevant Pharmacy Service/s
<b>Adolescence 12-19 years</b>	Accidental injury	<ul style="list-style-type: none"> <li>• Signposting</li> <li>• Medicines Use Review (medicines and driving)</li> </ul>		Alcohol use	<ul style="list-style-type: none"> <li>• Alcohol IBA</li> <li>• Referral to specialist treatment</li> <li>• Signposting and advice</li> </ul>
	Sports injuries	<ul style="list-style-type: none"> <li>• Minor ailments services</li> <li>• Sale of non-prescription medicines</li> </ul>		Drug misuse	<ul style="list-style-type: none"> <li>• Advice and signposting</li> <li>• Needle exchange</li> <li>• Supervised consumption</li> </ul>
	Transfer of responsibility for medicine-taking	<ul style="list-style-type: none"> <li>• Medicines Use Review (medicines and driving/sport/exams/school etc.)</li> <li>• New Medicines Service</li> </ul>		Exercise	<ul style="list-style-type: none"> <li>• Signposting to community resources</li> </ul>
	Vaccination	<ul style="list-style-type: none"> <li>• Signposting for boosters</li> <li>• HPV vaccination</li> </ul>		Mental health	<ul style="list-style-type: none"> <li>• Signposting from sale of relevant non-prescription medicines (sleep aids, complementary therapies)</li> <li>• Referral to specialist services</li> </ul>
<b>Young Adulthood 20-35 years</b>	Accidental injury	<ul style="list-style-type: none"> <li>• Signposting</li> <li>• Medicines Use Review (medicines and driving)</li> </ul>			
<b>Middle Adulthood 36-59 years</b>	Healthy families	<ul style="list-style-type: none"> <li>• For parents – drug misuse, smoking, alcohol advice</li> </ul>		Pregnancy	<ul style="list-style-type: none"> <li>• Sale of pregnancy tests</li> <li>• Pregnancy test service</li> <li>• Referral to midwife</li> </ul>
	Sexual health	<ul style="list-style-type: none"> <li>• STI testing</li> <li>• Contraceptive advice</li> <li>• Sale of condoms</li> <li>• Erectile dysfunction counselling</li> <li>• Menopause counselling</li> </ul>		Smoking	<ul style="list-style-type: none"> <li>• Smoking cessation</li> </ul>
	Cardiovascular risk counselling	<ul style="list-style-type: none"> <li>• Signposting and counselling</li> </ul>		Workplace Health	<ul style="list-style-type: none"> <li>• Smoking cessation</li> <li>• Minor ailments</li> </ul>

## Part 5 – Older Adulthood (60+ years)

The chance of managing multiple long-term conditions and polypharmacy increases. The maintenance of independence and continued home living may depend on creating a manageable medication regimen and paying close attention to side-effects (thus e.g. preventing falls). Carers in all settings must be included as partners in care.

Visits to hospital are more likely. End-of-life care is a concern. The ongoing health risks of younger adults, however, like smoking and sexual health should not be ignored.

The challenges of medication administration in care homes are well documented, and pharmacists could provide advice and systems to optimise this.

Age group	Need	Relevant Pharmacy Service/s
Older Adulthood 60+ years	Care home engagement	<ul style="list-style-type: none"> <li>• Pharmacist advice (medicines storage etc.)</li> <li>• Independent prescribing</li> <li>• Medicines Use Review</li> <li>• Clinical Medication Review</li> </ul>
	Carer engagement	<ul style="list-style-type: none"> <li>• Medicines Use Review</li> <li>• Clinical Medication Review</li> <li>• Signposting to services</li> </ul>
	Dementia screening & management	<ul style="list-style-type: none"> <li>• Medicines Use Review</li> <li>• Clinical Medication Review</li> <li>• Signposting to services</li> </ul>
	Falls prevention	<ul style="list-style-type: none"> <li>• Medicines Use Review</li> <li>• Clinical Medication Review</li> <li>• New Medicine Service</li> </ul>
	Maintaining independence	<ul style="list-style-type: none"> <li>• Home delivery service</li> <li>• Hosiery fitting service</li> <li>• Sale of incontinence aids</li> <li>• Sale of mobility aids</li> <li>• Minor ailments service</li> </ul>
	Medication adherence	<ul style="list-style-type: none"> <li>• Home delivery service</li> <li>• Compliance aids e.g. Monitored Dosage Systems (care home or community), “aide memoire” etc</li> <li>• Medicines Use Review</li> <li>• Clinical Medication Review</li> <li>• New Medicine Service</li> </ul>
	Sexual health	<ul style="list-style-type: none"> <li>• STI testing</li> <li>• Sale of condoms</li> <li>• Erectile dysfunction counselling</li> </ul>
	Smoking	<ul style="list-style-type: none"> <li>• Smoking cessation</li> </ul>
	Vaccination	<ul style="list-style-type: none"> <li>• Shingles vaccination (70 years old +)</li> </ul>

**References:**

PHE plan of work for children and young people

<https://publichealthmatters.blog.gov.uk/wp-content/uploads/sites/33/2014/01/life-course-approach.png>

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National Service Framework for Children, Young People and Maternity Services (DH England and DfES 2004)

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