

## **DRAFT ASHP Statement on Telehealth Pharmacy Practice**

### **1 Position**

2 ASHP believes appropriately trained and equipped pharmacists can use telehealth to remotely  
3 oversee pharmacy operations and provide distributive, clinical, analytical, consultative, and  
4 managerial services. ASHP advocates for telehealth utilization in suitable functions of pharmacy  
5 operations and patient care to improve patient outcomes, expand access to healthcare,  
6 enhance patient safety, achieve effective cost-of-care, and interact with other healthcare team  
7 members. ASHP further advocates that boards of pharmacy adopt compatible regulations that  
8 enable the use of United States-based telehealth services within and across state lines for  
9 appropriate practice settings and that additional research be conducted to establish best  
10 practices for telehealth.

### **11 Background**

12 **Telehealth.** Definitions of telehealth vary widely. The Agency for Healthcare Research  
13 and Quality has defined telehealth as "the use of information and telecommunications  
14 technology in healthcare delivery for a specific patient involving a provider across distance or  
15 time."<sup>1</sup> The Health Resources and Services Administration (HRSA) of the U.S. Department of  
16 Health and Human Services (HHS) defines telehealth more broadly: "the use of electronic  
17 information and telecommunications technologies to support and promote long-distance  
18 clinical healthcare, patient and professional health-related education, and public health and  
19 health administration. Technologies include videoconferencing, the internet, store- and-  
20 forward imaging, streaming media, and landline and wireless communications."<sup>2</sup> The 2020

21 American Medical Association (AMA) Telehealth Playbook<sup>3</sup> defines telehealth as “a digital  
22 health solution that connects the patient and clinician through real-time audio and video  
23 technology” and states that telehealth “can be used as an alternative to traditional in-person  
24 care delivery and, in certain circumstances, can be used to deliver care such as the diagnosis,  
25 consultation, treatment, education, care management, and self-management of patients.”

26         The Centers for Medicare & Medicaid Services (CMS) distinguishes between telehealth  
27 and telemedicine, at least as it concerns Medicaid, defining “Telehealth (or Telemonitoring)” as  
28 “the use of telecommunications and information technology to provide access to health  
29 assessment, diagnosis, intervention, consultation, supervision and information across  
30 distance.”<sup>4</sup> CMS follows this definition by saying “[t]elehealth includes such technologies as  
31 telephones, facsimile machines, electronic mail systems, and remote patient monitoring  
32 devices, which are used to collect and transmit patient data for monitoring and interpretation.”  
33 CMS notes that although such technologies “do not meet the Medicaid definition of  
34 telemedicine they are often considered under the broad umbrella of telehealth services” and  
35 may nevertheless be covered and reimbursed as part of a Medicaid coverable service.<sup>4</sup> Other  
36 authors<sup>5</sup> have also made this distinction, while some organizations do not; the American  
37 Academy of Pediatrics states that terms *telemedicine* and *telehealth* “are considered  
38 synonymous and are used interchangeably to describe use of electronic information and  
39 telecommunications technologies to support clinical healthcare, patient and professional  
40 health-related education, public health and health administration.”<sup>6</sup>

41         Just as many definitions of telehealth include a broader scope of virtual healthcare  
42 services than does telemedicine, ASHP believes “telehealth pharmacy practice” is a more

43 appropriate overarching term for the virtual delivery of pharmacists' patient care services than  
44 "telepharmacy." For the purposes of this document, ASHP defines telehealth pharmacy practice  
45 as use of electronic information and telecommunications technology by pharmacists to provide  
46 patient care services. Telehealth patient care services and operations may include, but are not  
47 limited to, the following:

- 48 • comprehensive medication management,
- 49 • chronic disease state management,
- 50 • medication selection and dispensing,
- 51 • sterile and nonsterile compounding verification,
- 52 • patient assessment and evaluation,
- 53 • adverse drug event detection and monitoring,
- 54 • patient counseling,
- 55 • medication reconciliation,
- 56 • clinical consultation,
- 57 • outcomes assessment,
- 58 • healthcare data analysis,
- 59 • interacting with other healthcare practitioners,
- 60 • healthcare personnel supervision,
- 61 • provision of drug information, and
- 62 • oversight of aspects of pharmacy operations.

63            ***Practice Advancement Initiative 2030 (PAI 2030)***. The ASHP PAI states that the  
64 pharmacy enterprise “must have sufficient resources to develop, implement, and maintain  
65 technology-related medication-use safety standards.”<sup>7</sup> It further recommends that virtual  
66 pharmacy services “should be deployed to optimize operational and clinical services that  
67 extend patient care services and enhance continuity of care.”<sup>7</sup>

#### 68 **Telehealth pharmacy practice applications**

69 Telehealth pharmacy practice has demonstrated value in a variety of settings for medication  
70 selection, order review, and dispensing; intravenous (IV) admixture verification; patient  
71 counseling and monitoring; and clinical services.<sup>8</sup> Telehealth pharmacy services have long  
72 proven useful in supporting settings that perform medication-use activities when a pharmacist  
73 is not physically present or pharmacy resources may be limited, such as geographically isolated  
74 ambulatory clinics and healthcare facilities.<sup>9-12</sup> Telehealth also provides a solution for order  
75 review and verification in tertiary medical centers when staffing, particularly in specialty areas  
76 such as oncology and pediatrics, is limited (e.g., due to attrition or staff turnover), creating a  
77 mechanism for health systems to provide enterprise-level pharmacy services throughout the  
78 system even when not all pharmacies operate 24 hours per day.<sup>13,14</sup> Other facilities may use  
79 telehealth services for supplemental workload balancing, which includes network workload  
80 balancing and on-call assistance.<sup>15</sup> In addition, telehealth provides a tool for virtual monitoring,  
81 assessment, detection, decision-making, and adverse drug event management.<sup>16</sup>

82           **Medication selection, order review, and dispensing.** Telehealth has been used  
83 successfully to enable pharmacists to be directly involved in the medication selection process  
84 for patients at geographically remote hospitals. Specific tasks may include but are not limited to  
85 remote review of new medication orders, entry of orders into the patient’s electronic health  
86 record, release of medication from an automated dispensing cabinet, and electronic  
87 supervision of technicians in the performance of pharmacy operations.<sup>9-12,17-20</sup>

88           **IV admixture verification.** Although technology systems for remote checking of IV  
89 admixture preparation were originally designed to reduce contamination risk by reducing the  
90 need for pharmacists to physically enter sterile compounding areas to review and verify  
91 finished preparations, these and similar technologies can be used for verification of admixtures  
92 at different stages of preparation, across multiple sites, and over long distances.<sup>20-21</sup> The  
93 technology also reduces exposure risk by reducing the number of pharmacy personnel and  
94 other providers having to handle hazardous medications, such as chemotherapy.  
95 Documentation and safety can also be enhanced with these systems, as images capture lot  
96 numbers and expiration dates in addition to the step-by-step processes of preparation. Some of  
97 these systems perform in-process verification steps (e.g., barcode verification of correct  
98 product selection, gravimetric verification of additive quantities), which provide additional  
99 assurance to the remote pharmacist that the preparation is correct.

100           **Patient counseling and monitoring.** Pharmacists have been using telecommunications  
101 technology to counsel patients about the proper use of their medications for as long as  
102 telephone service lines have been available. Early examples of pharmacists employing  
103 videoconferencing technology to counsel geographically remote patients include the outreach

104 program by a Federally Qualified Health Center in eastern Washington State<sup>22</sup> and another  
105 program in North Dakota.<sup>23</sup> The Indian Health Service has also implemented videoconferencing  
106 technology to provide pharmacist services to remote areas of Alaska,<sup>24</sup> and the U.S. Navy has  
107 deployed use of this technology worldwide.<sup>25</sup> Other examples include the use of  
108 videoconferencing to provide comprehensive medication management,<sup>26</sup> chronic disease state  
109 management (e.g., diabetes mellitus, chronic obstructive pulmonary disease, congestive heart  
110 failure and other cardiovascular conditions, post-MI cardiac rehabilitation, gout),<sup>27-38</sup> specialty  
111 pharmacy services (e.g., oncology, autoimmune diseases, multiple sclerosis, cystic fibrosis),<sup>39-42</sup>  
112 and mental and behavioral health telehealth.<sup>43,44</sup> Implementation of intensive care unit  
113 telemedicine services, including telehealth pharmacy practice, led to reduced hospital length of  
114 stay, an increase in institutional best practice adherence, and lower rates of preventable  
115 complications.<sup>45</sup> Pharmacists are also being encouraged to use mobile applications to  
116 communicate with patients to help them manage their diseases and medications.<sup>46,47</sup>

117 ***Expanding pharmacy services.*** ASHP supports implementation of telehealth services to  
118 “maintain pharmacy operations and pharmacist-led comprehensive medication management  
119 that extend patient care services to and enhance continuity of care for rural or medically  
120 underserved populations.”<sup>48</sup> Telehealth can be used to enable onsite pharmacy activities if the  
121 pharmacist is not physically located at the point of pharmacy operation or patient care.

122 Millions of Americans live in areas, both rural and urban, devoid of pharmacies.<sup>49</sup> Until  
123 recently, much of the focus of expanding telehealth pharmacy practice has been on rural areas.  
124 According to the 2019 National Pharmacist Workforce Study (NPWS),<sup>50</sup> more licensed  
125 pharmacists were unemployed or working outside of pharmacy than in the 2014 NPWS,<sup>51</sup> which

126 suggests there has not been a shortage of pharmacists. However, workforce issues continue to  
127 plague rural areas.<sup>52</sup> Between 2003 and 2018, 16% (1,231) of independently-owned rural  
128 pharmacies closed.<sup>53</sup> Similarly, 180 rural hospitals closed between 2005 and 2021, causing  
129 pharmacists and other professionals to leave rural areas for employment.<sup>54</sup> Telehealth  
130 pharmacy services in retail and hospital pharmacy settings can help fill the gap.<sup>55-57</sup> More  
131 recently, attention has also turned to the problem of “pharmacy deserts” in urban areas,<sup>58,59</sup> as  
132 Federally Qualified Health Centers (FQHCs) and other healthcare institutions increase utilization  
133 of telehealth and explore strategies such as remote dispensing.<sup>60-62</sup>

134 **Federal regulation.** Federal regulation of telehealth has evolved, and CMS has  
135 established standards for telehealth.<sup>63</sup> The Health Insurance Portability and Accountability Act<sup>64</sup>  
136 (HIPAA) and Subtitle D of the Health Information Technology for Economic and Clinical Health  
137 (HITECH) Act,<sup>65</sup> which was enacted as part of the American Recovery and Reinvestment Act of  
138 2009,<sup>66</sup> address privacy and security concerns associated with electronic transmission of health  
139 information. FDA has jurisdiction over medical software and equipment that may be involved in  
140 healthcare whether online, mobile, or in-house. Pharmacists communicating with a patient via a  
141 mobile application should ensure it is compliant with FDA standards.<sup>67</sup>

142 ASHP advocates for changes in federal (e.g., Social Security Act), state, and third-party  
143 payment programs to define pharmacists as healthcare providers and provide mechanisms that  
144 support improved interactions between pharmacists and other healthcare providers that  
145 benefit patient care.<sup>68,69</sup> ASHP recognizes that reimbursement for those provider services may  
146 be contingent on credentialing by payers and other appropriate bodies. ASHP further  
147 encourages health systems to include pharmacists in their credentialing and privileging

148 processes in a manner consistent with other healthcare professionals to assess pharmacists'  
149 competence to engage in patient care services, including telehealth pharmacy practice.<sup>70</sup>  
150 Provider status and institutional privileging and credentialing processes expand pharmacists'  
151 ability to bill for services they are already providing, enhancing the health system's  
152 reimbursement for services and facilitating ongoing growth of telehealth pharmacy practice. In  
153 addition, the Federal government and accrediting bodies should collaboratively establish  
154 standards for telehealth pharmacy practice and associated technologies, and incorporate  
155 regulatory and reimbursement imperatives to encourage adoption of standards regarding  
156 telehealth practice that would foster wider adoption and improve patient care.

157 **State regulation.** The Model Act, while not a federal standard, provides boards of  
158 pharmacy with model language for developing state laws or board rules.<sup>71</sup> The Model Act  
159 defines telehealth-related terms and provides requirements for remote pharmacy services.  
160 Many states now have specific regulations for telehealth.<sup>72</sup> However, these state laws and  
161 regulations demonstrate wide variation in the application and control of telehealth systems.<sup>73</sup>  
162 States have variously described telehealth pharmacy practice in terms of remote order  
163 management with or without dispensing using automated dispensing cabinets, remote  
164 supervision of medication order filling with or without automated medication order dispensing,  
165 and inpatient dispensing activities (including IV preparation). When providing pharmacy  
166 services across state lines, pharmacists must be aware of the regulations of the state in which  
167 the pharmacist is located and the state in which the patient is receiving care.<sup>74</sup> State laws and  
168 regulations vary on the definition of telehealth, licensing requirements, education and training  
169 for participating pharmacists and technicians, practice setting restrictions, and geographical

170 limitations for the remotely practicing pharmacist. State laws and regulations also vary widely  
171 regarding the technology required to implement telehealth. Although most stipulate a camera  
172 and some audio exchange between the pharmacy and the remote pharmacist, the specification  
173 of the types of technology (video vs. still, telephone vs. voice over internet protocol [VoIP]) and  
174 the types and amounts of transactional information captured vary widely. Some state boards of  
175 pharmacy have identified specific training, certification, or experience that pharmacy  
176 technicians engaged in telehealth must possess.<sup>75,76</sup>

177         As use of telehealth expands, state board of pharmacy regulations and state laws  
178 regarding its use will increase. ASHP advocates that federal and state governments adopt laws  
179 and regulations that modernize and standardize telehealth practices nationwide and facilitate  
180 the use of U.S.-based telehealth services to enhance interprofessional practices. ASHP further  
181 advocates that boards of pharmacy and state agencies that regulate pharmacy practice address  
182 the following regarding telehealth pharmacy practice:

- 183             1. Education and training of participating pharmacists;
- 184             2. Education, training, certification by the Pharmacy Technician Certification Board,  
185                 and licensure of participating pharmacy technicians;
- 186             3. Communication and information systems requirements;
- 187             4. Remote order entry, prospective order review, verification of the completed  
188                 medication order before dispensing, and dispensing;
- 189             5. Direct patient-care services, including comprehensive medication management  
190                 and medication therapy management services and patient counseling and  
191                 education;

- 192 6. Licensure (including reciprocity) of participating pharmacies and pharmacists;
- 193 7. Service arrangements that cross state borders;
- 194 8. Service arrangements within the same corporate entity or between different  
195 corporate entities;
- 196 9. Service arrangements for workload relief in the point-of-care pharmacy during  
197 peak periods;
- 198 10. Pharmacist access to all applicable patient information; and
- 199 11. Development and monitoring of patient safety, quality, and outcomes  
200 measures.<sup>77</sup>

201 ASHP advocates for interstate pharmacist licensure to expand the mobility of pharmacists,  
202 especially during emergencies, and to enhance their ability to practice in multiple states, which  
203 is particularly important to telehealth pharmacy practice.<sup>78</sup> National Association of Boards of  
204 Pharmacy's (NABP) Electronic Licensure Transfer Program<sup>79</sup> is a good first step toward true  
205 interstate licensure but should be enhanced at the state level to meet the needs presented by  
206 the rapid expansion of telehealth pharmacy practice. ASHP supports exploration of licensure  
207 models (e.g., endorsements, interstate agreements) that would allow pharmacists to provide  
208 specific services across state lines and encourages advocacy to implement such models.<sup>78</sup>

209 In addition, some state legislatures have passed laws ensuring that insurance  
210 reimbursements for telehealth are the same as non-telehealth services. Whether these statutes  
211 can or will be applied to pharmacy-related telehealth services in those states remains  
212 unanswered. Many of the telehealth payment models involving pharmacists have been  
213 implemented in managed care organizations that see value of increasing frequency of visits and

214 follow-up to improve quality of care in chronic disease state management.<sup>80</sup> As payment shifts  
215 toward value-based care, insurance payers may be increasingly interested in telehealth  
216 models.<sup>81</sup>

### 217 **Reimbursement for Telehealth Pharmacy Practice Services**

218 ASHP advocates for reimbursement for pharmacists' provision of telehealth pharmacy services  
219 commensurate with the complexity and duration of service and consistent with other  
220 healthcare providers, to ensure that patients can maintain access to vital services. During the  
221 COVID-19 public health emergency, hospitals, health systems, and clinics quickly pivoted to  
222 providing patient services via telehealth. The Centers for Medicare & Medicaid Services,  
223 commercial payers, and state policymakers have indicated that they would like to maintain  
224 telehealth services post-pandemic. Because pharmacists are not currently recognized as  
225 healthcare providers through Medicare Part B, reimbursement for telehealth services has been  
226 challenging.<sup>82</sup>

227 ASHP advocates for full recognition of pharmacists as reimbursable healthcare providers  
228 through Medicare, Medicaid, and all health insurance plans.<sup>68</sup> Since this has not yet been fully  
229 realized, as an interim step, ASHP supports federal and state legislation and regulation that  
230 would provide qualified pharmacists (i.e., as determined by the state board of pharmacy or the  
231 credentialing board of a qualified healthcare institution) provider status to bill for services  
232 rendered through telehealth. ASHP also advocates billing for services using existing billing  
233 codes, and expansion of those codes, as the current set is limited and does not capture the full  
234 potential of clinical pharmacy services, including services provided via telehealth.<sup>83</sup>

**235 Telehealth infrastructure**

236 The technology infrastructure required for the implementation and maintenance of telehealth  
237 services may be scalable and adjusted to fit the care setting. Two intra-system facilities may  
238 already share a network, a pharmacy information system, and possibly an order management  
239 system. In this scenario, perhaps the only additional equipment needed is a digital  
240 communication system for transmission of any orders not provided via computerized provider  
241 order entry (CPOE).

242 In contrast, the inter-system model provides telehealth services to a facility external to  
243 the health system. This could involve a variety of infrastructures; for example, a cloud-based  
244 health information exchange (HIE) where all patients and care providers interact through a  
245 variety of hardware and software. Additionally, all data may be stored in a relational database  
246 or data warehouse.

247 As more pharmacists are providing telehealth management, it is recommended that  
248 organizations investigate the feasibility of integrating telehealth solutions (e.g., video  
249 conferencing software, remote monitoring devices) into the electronic health record (EHR).  
250 Telehealth EHR integration streamlines workflow, optimizes cognitive workload, minimizes  
251 clinician burden, and facilitates documentation.<sup>84,85</sup> In addition, incorporation of decision  
252 support tools, machine learning, and internet-of-things technologies will offer greater insights,  
253 earlier prediction, and better care by pharmacists to patients and caregivers in a variety of  
254 settings, ranging from institutional to home-based care.

255 With all electronic systems and workflow processes, redundancies and contingency  
256 plans must be carefully outlined and readily referenced in organizational policies and  
257 procedures to ensure continuity of operations and safety in instances of unplanned events.

#### 258 **Security of information and equipment**

259 The security and integrity of patient data is of paramount importance when determining the  
260 information technology setup of a telehealth system. Security is vital when accessing and  
261 modifying patient records. Adherence to HIPAA<sup>64</sup> and HITECH<sup>65</sup> regulations are important to  
262 both the providers of telehealth pharmacy services as well as the entities who receive them. As  
263 security continues to be threatened by breaches and ransomware, facilities are tightening their  
264 security policies. Telehealth pharmacy providers may notice additional layers of security such as  
265 multifactor authentication requirements for access to their network or electronic medical  
266 record as well as shorter workstation session timeouts with inactivity.

267 Security is important wherever telehealth pharmacy is practiced. It is important to note  
268 that some states require that pharmacists work only from licensed pharmacies. This includes  
269 home-based practices and corporate environments which may need to be licensed as a  
270 professional pharmacy according to state regulations. A professional and secure environment  
271 should be provided in every setting. Care should be taken to keep the environment a  
272 professional workspace with all necessary references, resources, confidentiality, and data  
273 security practices.

**274 Patient-centric considerations for the telehealth pharmacy visit**

275 The environment for provision of telehealth services should be evaluated from the patient's  
276 point of view. It should provide proper lighting to allow the patient to clearly see the  
277 pharmacist's face. Dress and appearance should be consistent with what would be seen within  
278 a healthcare facility. Ideally, the camera is at eye level to closely simulate a true face-to-face  
279 interaction. The background should appear professional, free from clutter, commotion, and  
280 provide a sense of privacy. Audio and video quality should be verified with the recipient as the  
281 visit is initiated. The patient should be allowed access to all applicable patient care records  
282 during an encounter when possible.

**283 Conclusion**

284 Telehealth is a method used in pharmacy practice in which pharmacists utilize electronic  
285 information and telecommunications technology to provide patient care services. Telehealth,  
286 supported by ASHP, allows expanded coverage, improved patient safety, and enhanced  
287 communication between patients, healthcare providers, and pharmacists. Variability in laws  
288 between states and evolving regulations must be closely monitored when implementing  
289 services. ASHP advocates for more research to investigate a refined definition and best  
290 practices in the implementation and delivery of telehealth services.

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