

1 **Barriers and best practices related to documentation of electronic care plans: a survey of community-**
2 **based pharmacies in four states**

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4 **Authors:**

5 **Amy Catherine Love Baggett, PharmD**, PGY1 Community-based Pharmacy Resident, Lloyd L Gregory
6 School of Pharmacy, Palm Beach Atlantic University, West Palm Beach, FL and Atlantis Pharmacy,
7 Atlantis, FL

8 **Erin Dorval, PharmD**, Residency Program Director and Assistant Professor of Pharmacy Practice, Lloyd L
9 Gregory School of Pharmacy, Palm Beach Atlantic University, West Palm Beach, FL and Atlantis
10 Pharmacy, Atlantis, FL

11 **Jordan Marie Ballou, PharmD, BCACP**, Clinical Assistant Professor, The University of Mississippi School
12 of Pharmacy, University, MS

13 **Erin Dalton, PharmD**, Assistant Professor, Department of Pharmacy Practice and PGY1 Community-
14 based Pharmacy Residency Program Director, South University School of Pharmacy, Savannah, GA

15 **Laura A. Rhodes, PharmD, BCACP**, Consultant for Enhanced Community Pharmacy Services and
16 Assistant Professor of Pharmacy Practice, Lloyd L Gregory School of Pharmacy, Palm Beach Atlantic
17 University, West Palm Beach, FL and Atlantis Pharmacy, Atlantis, FL

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28 Jordan Ballou discloses that she is the Managing Network Facilitator for CPESN Mississippi.

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30

31 **Corresponding author:**

32 Laura A. Rhodes, PharmD, BCACP; Department of Pharmacy Practice, Lloyd L. Gregory School of
33 Pharmacy, Palm Beach Atlantic University; 901 S Flagler Drive, West Palm Beach, FL, 33416;
34 laura_rhodes@pba.edu; (561) 803-2723.

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42 **ABSTRACT (300)**

43 **Background:** While the provision of enhanced pharmacy services within community-based pharmacy is
44 increasing, there remains an opportunity to improve efficient documentation of services. The
45 pharmacist eCare plan is defined as “a longitudinal person-centric dynamic plan that represents a
46 patient's and pharmacist's prioritized concerns, goals, and planned interventions and incorporates
47 medication-related information captured by all members of the care team.”

48 **Objective:** The primary objective was to identify barriers and best practices related to documentation of
49 eCare plans within community-based pharmacies participating in four Community Pharmacy Enhanced
50 Services Networks (CPESN).

51 **Methods:** One of two 24-question electronic surveys was distributed to pharmacies in CPESN Florida,
52 Georgia, Mississippi, and Ohio. Pharmacies submitting <10 eCare plans in the prior quarter received a
53 survey to assess barriers to implementation; pharmacies submitting ≥10 eCare plans received a survey
54 to assess best practices for implementation. An independent samples t-test assessed differences in
55 knowledges scores between groups.

56 **Results:** Sixty-three responses were received (Barriers=19; Best Practices=44). Best Practices pharmacies
57 scored higher than Barriers pharmacies on the knowledge portion of the survey (9.26 vs. 7.26 out of 13
58 points, p=.001). Barriers most frequently reported were staffing resources (n=11, 57.9%), perceived time
59 commitment (n=8, 42.1%), and lack of payment for services (n=8, 42.1%). Most Best Practices
60 pharmacies agreed or strongly agreed that they actively involve pharmacists (n=36, 81.8%) and student
61 pharmacists (n=33, 75.5%) in the eCare planning processes. The types of encounters most utilized by
62 Best Practice pharmacies were medication synchronization (n=35, 79.5%), drug therapy problems (n=29,
63 65.9%), assessment of adherence (n=28, 63.6%), blood pressure monitoring (n=27, 61.4%), and
64 medication reconciliation (n=24, 54.5%).

65 **Conclusions:** A difference in knowledge and perceptions exists between pharmacies who regularly eCare
66 plan and those who do not. These trends found should be utilized in creating training to increase eCare
67 planning quality and consistency in community-based pharmacy settings.

68 **Background (565)**

69 The expansion of pharmacist training programs moving beyond product distribution towards
70 comprehensive, patient-centered care has impacted the healthcare ecosystem in many ways.
71 Community-based pharmacists are becoming increasingly equipped to provide enhanced patient care
72 services and intervene to positively impact medication adherence and disease state management.¹

73 Research has shown that pharmacist-led interventions present a unique opportunity to decrease overall
74 healthcare costs, decrease hospital readmission rates, and improve patient outcomes through
75 medication synchronization, medication therapy management, transitions of care, chronic care
76 management, and similar programs.²⁻⁵ As highly accessible and frequently visited healthcare team
77 members,⁶ community-based pharmacists have many opportunities to make interventions and can
78 provide insight into barriers and issues patients may not disclose to other providers. The Joint
79 Commission of Pharmacy Practitioners' adoption of the Pharmacist Patient Care Process (PPCP) has
80 provided pharmacists a standardized method for implementing the patient care process. Pharmacy
81 schools are now required to teach the PPCP to all students as a part of their accreditation standards.⁷⁻⁸
82 Additionally, residency training programs have expanded in recent years, allowing for further specialized
83 training for pharmacists to engage with in direct patient care⁹⁻¹⁰ These factors help ensure that a stream
84 of pharmacists who are equipped to engage in direct patient care enter the marketplace.

85 While the provision of enhanced pharmacy services is increasing, there remains an opportunity
86 to improve in efficient documentation of patient care services. Since the implementation of the Health
87 Information Technology for Economic and Clinical Health (HITECH) Act in 2009, electronic health records
88 (EHRs) have been broadly implemented across a variety of healthcare settings, from large health
89 systems to small practice sites.¹¹⁻¹² However, widespread integration of electronic care planning in the
90 community-based pharmacy setting has lagged outside of medication therapy management. One reason
91 for this delay is that the electronic care plan (eCare plan) initiative and medication management
92 Systematized Nomenclature Of Medicine Clinical Term (SNOMED CT) codes utilized in eCare plans were
93 not published and formally available for use until 2016.¹³ The National Council for Prescription Drug
94 Programs defines the pharmacist eCare plan as "a longitudinal person-centric dynamic plan that
95 represents a patient's and pharmacist's prioritized concerns, goals, and planned interventions and
96 incorporates medication-related information captured by all members of the care team".¹³⁻¹⁵

97 The PPCP is intended for documentation facilitated by health information technology, enabling
98 pharmacists to obtain needed patient information and communicate interventions to other members of
99 the healthcare team.⁷ It is for this reason that the utilization of eCare plans has the potential to improve
100 continuity of care and, in turn, deliver a way to input data that may ultimately be used to define value
101 expression for community-based pharmacist-provided enhanced services. Clinically integrated networks,
102 such as the Community Pharmacy Enhanced Services Network (CPESN USA), are networks of pharmacies
103 that coordinate patient care with broader care teams to provide medication optimization and enhanced

104 services for complex patients. There are approximately 50 local networks that fall under the CPESN USA
105 parent organization, of which most represent a single state (e.g., CPESN Florida). All pharmacies within
106 these local networks offer enhanced services beyond prescription dispensing and are held to quality
107 assurance standards, which are defined by CPESN USA and include expectations for quantity and quality
108 of eCare planning.¹⁶ Many CPESN pharmacies have embraced the eCare planning initiative, while others
109 have been slower to implement it. Importantly, barriers and best practices to implementation of eCare
110 planning have not yet been described in the literature.

111

112 **Objectives (39)**

113 The primary objective of this study was to identify barriers and best practices related to
114 documentation of eCare plans within community-based pharmacies who are members of the
115 Community Pharmacy Enhanced Services Networks (CPESN) of Florida, Georgia, Mississippi, and Ohio.

116

117 **Methods (371)**

118 We performed a cross-sectional study of community-based pharmacies in four states relating to
119 documentation of eCare planning. This project was approved by the Institutional Review Board of Palm
120 Beach Atlantic University and all respondents were provided written informed consent. Pharmacies
121 were included if they are participating pharmacy in CPESN Florida, Georgia, Mississippi, or Ohio. Using
122 historical reports of eCare planning quantities, the research team determined if each participating
123 pharmacy achieved the metrics set forth in the CPESN USA eCare planning standard, which requires 10
124 eCare plans to be submitted each quarter. Pharmacies who submitted <10 eCare plans in the third
125 quarter of 2020 received the barriers survey. Pharmacies who submitted 10 or more eCare plans in the
126 third quarter of 2020 received the best practices survey. Pharmacies were excluded if they were not
127 participating pharmacies in one of the aforementioned CPESN networks.

128 An electronic link to one of two 24-question surveys was distributed via email using Constant
129 Contact to the primary contact at all participating pharmacies in CPESN Florida, Georgia, Mississippi, and
130 Ohio. Data was collected via two online Microsoft Form surveys. Items common to both surveys
131 included voluntary consent, demographics, knowledge, perceptions, and goals of eCare planning.
132 Pharmacies were asked to identify goals their pharmacy team had for eCare planning in an open-ended
133 response format. The Barriers survey included questions identifying barriers to implementation of eCare
134 planning as well as the preferred method(s) to address barriers through educational materials. The Best

135 Practices survey included questions identifying best practices in workflow, staff utilization, and timing of
136 eCare planning. The survey remained open for 14 days with a reminder sent on days 7 and 12. An
137 incentive of a drawing for a \$50 Visa gift card was offered to those who completed the survey. Two
138 pharmacies from each network were randomly chosen to receive a \$50 Visa gift card.

139 After survey closure, data was exported to Microsoft Excel for analysis. Descriptive statistics
140 were utilized to evaluate data. An independent samples t-test assessed for differences between
141 knowledges scores between the barriers survey group and the best practices survey group. This analysis
142 was performed using SPSS v.26 (IBM, 2019). Qualitative data was gleaned from open-ended questions
143 and analyzed thematically using inductive and deductive coding.

144

145 **Results (511)**

146 There were 181 Barriers surveys distributed via Constant Contact to participating pharmacies
147 meeting the Barriers criteria; of these, 173 surveys were successfully delivered and 19 survey responses
148 completed (response rate 11.0%). There were 108 Best Practices surveys distributed; of these, 107
149 surveys were successfully delivered and 44 survey responses were completed (response rate 41.1%).
150 Demographic characteristics of survey respondents are available in **Table 1**.

151 *Knowledge and Perceptions*

152 Best Practices pharmacies scored higher than Barriers pharmacies on their knowledge
153 surrounding eCare planning (9.26 vs. 7.26 out of 13 points, CI -4.0 to -1.2, $p = .001$). Best Practices
154 pharmacies more frequently reported the perception that eCare planning enhanced their value to
155 payers and providers, enhancing the quality of care for their patients, and viewed eCare planning as a
156 valuable use of their time that should be an integral part of their team's workflow. In contrast, Barriers
157 pharmacies more frequently reported views on eCare planning as too much work with not enough
158 return on investment (**Figure 1**).

159 *Barriers*

160 The barriers most frequently reported as preventing pharmacies from completing 10 or more
161 eCare plans in the previous quarter included staffing resources ($n=11$, 57.9%), the perceived time
162 commitment associated with eCare planning ($n=8$, 42.1%), and the lack of payment for services ($n=8$,
163 42.1%). Other barriers reported were eCare plan technological/transmission issues, staff receptiveness,
164 unwillingness to change workflow, or new costs associated with eCare planning technology. Additional

165 themes gleaned from open-ended explanations included COVID-19 challenges and staff turnover. Most
166 pharmacies reported a preference for additional training by their local CPESN networks (n=7, 36.8%) vs.
167 CPESN USA, their eCare planning vendor, or national or state pharmacy associations. A preference was
168 expressed for the training to be in the format of a pre-recorded webinar (n=11, 57.9%). Qualitative
169 analysis revealed that Barriers pharmacies' goals included involving non-pharmacist staff in the eCare
170 planning process and meeting the eCare plan standard by completing more eCare plans.

171 *Best Practices*

172 A majority of pharmacies either agreed or strongly agreed that they actively involve pharmacists
173 (n=36, 81.8%) or student pharmacists (n=33, 75.5%) in the eCare planning processes, while pharmacy
174 technicians and other staff were less utilized. Most teams submitted eCare plans throughout the day
175 (n=35, 80.0%) and throughout the month (n=39, 88.6%). Others submitted either in the morning (n=2,
176 4.5%) or at the end of the day (n=7, 16.0%). Themes for best practice workflow implementation
177 identified from open-text responses included flagging/notating prescriptions or bags for potential
178 encounters, using a basket to collect encounters written for later documentation, focusing on specific
179 patient populations monthly, and utilizing an overlap in pharmacy staff as an opportunity to complete
180 and document encounters. The types of eCare plan encounters most utilized by Best Practice
181 pharmacies were medication synchronization (n=35, 79.5%), drug therapy problems (n=29, 65.9%),
182 assessment of adherence (n=28, 63.6%), blood pressure monitoring (n=27, 61.4%), and medication
183 reconciliation (n=24, 54.5%). Qualitative analysis revealed Best Practices pharmacies' goals including
184 increasing the number of eCare plans, altering workflow to allow for increased resources to complete
185 eCare plans, increasing knowledge to be prepared for payer opportunities, and increasing types of eCare
186 plans utilized.

187

188 **Discussion (631)**

189 Pharmacies who are members of the CPESN USA network must meet eCare planning
190 requirements that define the quantity and quality of eCare plan submissions. The concept of eCare
191 planning is a crucial aspect of the appointment-based model embraced by the organization, which seeks
192 to shift pharmacies' focus from passively filling prescriptions to proactively synchronizing pick-up dates
193 for chronic medications, enabling monthly medication reviews and opportunities to identify and act on
194 medication-related problems and optimization.¹⁸ Documentation of patient encounters provides a
195 record of data (e.g.: blood pressure, glycated hemoglobin percentage, lipid panels, INR levels) to

196 demonstrate value-based care to other healthcare providers as well as payers. We sought to learn
197 reasons why pharmacies were or were not documenting eCare plans and how they were doing so.

198 It appears Best Practices pharmacies submitted more specific, measurable goals for quality and
199 quantity of eCare planning compared to Barriers pharmacies, who had more generalized goals. The Best
200 Practices pharmacies' increased awareness and focus on meeting those goals may have contributed to
201 their success in eCare planning. There is data surrounding SMART (specific, measurable, attainable,
202 relevant, and time-based) goals and their usefulness in creating successful projects in the workplace
203 which is applicable to setting goals for patient therapy.^{19,20} Further, more pharmacies in the Best
204 Practices survey had been eCare planning >1 year, while more Barriers pharmacies reported eCare
205 planning <1 year. This additional time may have allowed Best Practices pharmacies to practice, adjust
206 workflow, or attend trainings on eCare planning to enhance their knowledge and implementation. It is
207 important to note that at the time of the survey, pharmacies in both groups had shifted their focus
208 toward preparing to receive COVID-19 vaccines, which may have influenced responses at the time
209 regarding time constraints. One of the Best Practices pharmacies' most utilized eCare plan encounter
210 types included medication synchronization, which aids in adherence and convenience to patients since it
211 aims to decrease their number of trips to the pharmacy.¹⁷ This is another minimum requirement by
212 CPESN USA that participating pharmacies must adhere to, which may explain why it was the most widely
213 reported eCare plan encounter type.

214 Barriers pharmacies more often had documentation systems that did not communicate with
215 their dispensing software. They also reported time constraints, staffing resources, and lack of payment
216 for services as barriers to implementation. At this time, there are many emerging opportunities in
217 payment for pharmacies by contracting with individual payers for specific enhanced services. To be able
218 to engage with payers in this manner, pharmacies must first have a process to capture data on patient
219 outcomes, which means having a streamlined process to integrate eCare planning into the pharmacy's
220 workflow. Having this process prior to high-stakes expectations of deliverables is crucial to ensuring the
221 opportunities are met with success. Best Practices pharmacies found it helpful when the computer
222 systems communicated with one another, when documentation occurred as part of the workflow, and
223 when more than one type of pharmacy staff were engaged in the process. For pharmacies looking to
224 implement eCare planning into their work setting, we encourage setting specific, measurable,
225 attainable, relevant, time-based goals as well as utilizing best practices such as those listed throughout.
226 These practices, along with identifying payer opportunities, may be useful to include in training
227 programs for pharmacies currently struggling to implement eCare planning into daily workflow.

228 There are limitations in our study. Several pharmacies were co-owned and operated, oftentimes
229 having the same primary email contact for their CPESN network profiles. The program utilized to create
230 and distribute the emails did not allow for more than one email to be sent using the same email address
231 for differing store locations. The Barriers pharmacies had a lower response rate, which may suggest that
232 these pharmacies are already less engaged based on their lack of eCare plans submitted.

233

234 **Conclusion (118)**

235 A difference in knowledge and perceptions exists between pharmacies who regularly eCare plan
236 and those who do not. The most frequently identified barriers to eCare planning were the perceived
237 time commitment, staffing resources, and current lack of payment for services. Best practices for eCare
238 planning involved creating specific goals, utilizing pharmacists and student pharmacists, and
239 documenting as encounters occur. These trends in barriers and best practices found across states should
240 be utilized in creating training to increase and elevate eCare planning quality and consistency in the
241 community pharmacy setting. Further study is necessary to determine the implications of eCare
242 planning on demonstration of community pharmacist value to both third-party payers and to other
243 members of the healthcare team.

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