

# Subspecialty Board Certification for Primary Liver Transplant Physicians

*OPTN/UNOS Membership and Professional Standards Committee*

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<b>Executive Summary .....</b>	<b>1</b>
<b>What problem will this proposal solve? .....</b>	<b>2</b>
<b>Why should you support this proposal? .....</b>	<b>2</b>
<b>Which populations are impacted by this proposal? .....</b>	<b>3</b>
<b>How does this proposal impact the OPTN Strategic Plan? .....</b>	<b>3</b>
<b>How will the OPTN implement this proposal? .....</b>	<b>4</b>
<b>How will members implement this proposal? .....</b>	<b>4</b>
<b>How will members be evaluated for compliance with this proposal? .....</b>	<b>4</b>
<b>How will the sponsoring Committee evaluate whether this proposal was successful post implementation? .....</b>	<b>5</b>
<b>Policy or Bylaws Language.....</b>	<b>6</b>

# Subspecialty Board Certification for Primary Liver Transplant Physicians

*Affected Policies:* OPTN Bylaws Appendices F.4 (Primary Liver Transplant Physician Requirements), F.4.C (Three-year Pediatric Gastroenterology Fellowship Pathway), F.4.D (Pediatric Transplant Hepatology Fellowship Pathway), F.4.E (Combined Pediatric Gastroenterology/Transplant Hepatology Training and Experience Pathway)

*Sponsoring Committee:* Membership and Professional Standards

*Public Comment Period:* August 14, 2016 – October 14, 2016

## Executive Summary

OPTN Bylaws require that a designated liver transplant program's primary liver transplant physician must have "current board certification in gastroenterology." The OPTN/UNOS Membership and Professional Standards Committee (MPSC) is increasingly receiving liver program key personnel applications that propose a primary transplant physician who meets all the Bylaws' requirements except they have current board certification in transplant hepatology, with lapsed gastroenterology board certification. The MPSC generally feels that these individuals meet the intent of the key personnel Bylaws and that they are qualified to serve as a liver program's primary transplant physician; however, it ultimately rejects these applications because the individual does not fulfill the explicit requirements in the Bylaws. Although not presented as frequently, the MPSC is also aware of a subspecialty board certification created for cardiologists by the American Board of Internal Medicine- advanced heart failure and transplant cardiology. This proposal recommends replacing the gastroenterology board certification requirement for primary liver transplant physicians with a requirement that they are currently certified in transplant hepatology, or have a pediatric transplant hepatology certificate of added qualification. The MPSC ultimately decided not to incorporate the advanced heart failure and transplant cardiology board certification at this time, but believes this will need to be reconsidered as this certification becomes more prevalent. Requiring board certification for a transplant program's primary liver physician that entails more transplant-specific training stands to improve outcomes and promote patient safety for candidates on the waiting list, living donors, and transplant recipients. Additionally, modifying OPTN Bylaws to reflect current practice helps promote the efficient management of the OPTN.

## **What problem will this proposal solve?**

OPTN/UNOS Bylaws require that a designated liver transplant program's primary liver transplant physician must have "current board certification in gastroenterology." The OPTN/UNOS Membership and Professional Standards Committee (MPSC) is increasingly receiving liver program key personnel applications that propose a primary transplant physician who meets all the Bylaws' requirements except they have current board certification in transplant hepatology, with lapsed gastroenterology board certification. The MPSC generally feels that these individuals meet the intent of the key personnel Bylaws and that they are qualified to serve as a liver program's primary transplant physician; however, it ultimately rejects these applications because the individual does not fulfill the explicit requirements in the Bylaws. Although not presented as frequently to the MPSC, it is also aware of a subspecialty board certification created for cardiologists by the American Board of Internal Medicine- advanced heart failure and transplant cardiology.

## **Why should you support this proposal?**

The changes presented in this proposal stem directly from recommendations developed by a Joint Societies Working Group (JSWG), and are representative of a collaborative effort between the American Society of Transplantation (AST), the American Society of Transplant Surgeons (ASTS), the North American Transplant Coordinators Organization (NATCO), and the MPSC. The proposed changes update the Bylaws to reflect current practice regarding the subspecialty board certification that is more commonly held by transplant physicians at liver transplant programs.

## **How was this proposal developed?**

In 2013 the MPSC created a working group to address a number of aspects in the Bylaws key personnel requirements that had repeatedly been noted as ambiguous, unenforceable, or regularly yielding questions from members or the MPSC. Included in the topics assigned to this working group was the consideration of subspecialty board certifications. While the MPSC Working Group began addressing the list of topics it had been assigned, the Joint Societies Policy Steering Committee met in May 2014 and opted for the formation of a Joint Societies Working Group (JSWG) to address the key personnel Bylaws projects being worked on by the MPSC.

The JSWG acknowledged it is not uncommon for transplant hepatologists to maintain their transplant hepatology board certification, while letting their gastroenterology board certification lapse. Considering the first transplant hepatology examination occurred in 2006, the JSWG indicated that transplant hepatology board certification is now fairly common for physicians who are involved with a hospital's liver transplant program.

The group considered whether transplant hepatology certification should be an option for primary liver physician applicants, or if it should replace the gastroenterology certification requirement. The JSWG noted that the training and experience reflected by transplant hepatology certification is more applicable to the regular duties performed by liver transplant physician, as compared to gastroenterology board certification. Additionally, the training and experience reflected by gastroenterology board certification would not be completely ignored by requiring transplant hepatology board certification as an individual must have current board certification in gastroenterology to sit for the transplant hepatology board exam. Finally, the JSWG believes that relatively few liver programs' primary physicians were only gastroenterology certified and that transplant hepatology certification is prevalent among liver transplant programs. Considering these things, the JSWG agreed that the Bylaws should require that all primary liver transplant physicians are currently board certified in transplant hepatology.

Suggesting that transplant hepatology certification should replace the current requirement prompted members to consider how that may impact liver programs at children's hospitals. Pediatric transplant hepatologists on the OPTN/UNOS Pediatric Committee and the MPSC were consulted on this. The pediatric hepatologists consulted on this matter agreed that it would be appropriate to require that primary

transplant liver physicians possess current certification in transplant hepatology instead of requiring gastroenterology board certification. Along these same lines, and to accommodate key personnel at those programs that predominantly transplant pediatric patients, it was recommended that any Bylaws modifications should also allow a pediatric transplant hepatology certification of added qualification. Pediatric hepatologists familiar with this certification of added qualification indicated that they believed a sufficient number had been granted such that adding this new requirement should not create an undue burden on liver programs that primarily transplant pediatric patients.

With this confirmation, the JSWG felt comfortable recommending that the current primary liver transplant physician requirements should replace the current gastroenterology board certification requirement with a requirement that the individual must possess current board certification in transplant hepatology or a current pediatric transplant hepatology certification of added qualification.

The JSWG also discussed another subspecialty certification- advanced heart failure and transplant cardiology. The JSWG did not believe enough individuals in the transplant community possessed this certification at this time to justify including it in the Bylaws, but noted that this should be monitored for future revisions to the primary heart transplant physician requirements.

These recommendations were presented to the MPSC and Joint Societies Policy Steering Committee, respectively. Both groups endorsed these recommendations, with no concerns raised.

## **How well does this proposal address the problem statement?**

The Bylaws changes included in this proposal will effectively address the situation of primary liver transplant physician applicants who are seemingly qualified to serve in this role except they have current transplant hepatology board certification, while letting their gastroenterology board lapse. The MPSC believes it is necessary to update the Bylaws to reflect the current standards that are now common at liver transplant programs.

A strength of this proposal is that it requires liver transplant physicians to have a more transplant-specific board certification, which demonstrates more experience with liver transplantation as compared to gastroenterology board certification. Conversely, this higher standard may prove challenging for some liver programs to find appropriate individuals to serve as the primary liver transplant physician. Considering the current prevalence of the transplant hepatology board certification and the pediatric transplant hepatology certificate of added qualification, the JSWG and MPSC did not believe this unintended consequence would be common, and felt that it was important to make this change in the Bylaws.

## **Which populations are impacted by this proposal?**

As primary liver transplant physicians are required at every liver program, and as these proposed changes address primary liver transplant physician requirements, this proposal has the potential to impact all liver patients; however, the effect realized by any individual patient or group of patients is likely to be negligible as these changes are primarily operational in nature.

## **How does this proposal impact the OPTN Strategic Plan?**

1. *Increase the number of transplants:* There is no impact to this goal.
2. *Improve equity in access to transplants:* There is no impact to this goal.

3. *Improve waitlisted patient, living donor, and transplant recipient outcomes:* Requiring board certification for a transplant program's primary liver physician that entails more transplant-specific training may improve waitlisted patient, living donor, and transplant recipient outcomes.
4. *Promote living donor and transplant recipient safety:* Requiring board certification for a transplant program's primary liver physician that entails more transplant-specific training may improve living donor and transplant recipient safety.
5. *Promote the efficient management of the OPTN:* The MPSC receives primary liver transplant physician applications that indicate the applicant has current transplant hepatology boards and their gastroenterology boards have been allowed to lapse. Discussions with liver transplant physicians indicated that this approach is, and will continue to be, increasingly more common. Modifying OPTN Bylaws to reflect current practice helps promote the efficient management of the OPTN.

## **How will the OPTN implement this proposal?**

If public comment on this proposal is favorable, the MPSC would likely present these changes for the OPTN/UNOS Board of Directors' consideration at its December 2016 meeting. Assuming the Board adopts these changes, members will be alerted through a policy notice. Necessary updates to the membership application prompted by these changes would require approval by the Office of Management and Budget (OMB) prior to the implementation of these Bylaws. After application changes have been approved by OMB, the OPTN will notify the membership of the implementation date for these Bylaws. All applications received on or after this implementation date, would be evaluated by the MPSC considering these new Bylaws.

## **How will members implement this proposal?**

No immediate action will be required of members upon the implementation of these proposed changes. Membership and key personnel change applications for liver programs submitted on or after the implementation of these proposed changes will be evaluated relative to these requirements.

## **Transplant Hospitals**

Upon the adoption and implementation of these changes, primary liver transplant physician applicants will be required to have current transplant hepatology board certification or a pediatric transplant hepatology certification of added qualification.

## **Will this proposal require members to submit additional data?**

This proposal does not require additional data collection.

## **How will members be evaluated for compliance with this proposal?**

All membership and key personnel applications proposing a primary liver transplant physician that are received by UNOS on or after the implementation date of these changes must propose an individual who is currently certified in transplant hepatology, or have a pediatric transplant hepatology certificate of added qualification.

## **How will the sponsoring Committee evaluate whether this proposal was successful post implementation?**

The impact of these changes will be evaluated as the MPSC receives primary liver transplant physician key personnel applications. The MPSC will assess primary liver transplant physician board certification deficiencies, as well as the type and frequency of questions raised about this new requirement.

## Policy or Bylaws Language

Proposed new language is underlined (example) and language that is proposed for removal is struck through (~~example~~).

### 1 **Appendix F:**

### 2 **Membership and Personnel Requirements for Liver** 3 **Transplant Programs**

#### 4 **F.4 Primary Liver Transplant Physician Requirements**

5 A designated liver transplant program must have a primary physician who meets *all* the following  
6 requirements:

- 7
- 8 1. The physician must have an M.D., D.O., or equivalent degree from another country, with a current  
9 license to practice medicine in the hospital's state or jurisdiction.
- 10 2. The physician must be accepted onto the hospital's medical staff, and be on site at this hospital.
- 11 3. The physician must have documentation from the hospital credentialing committee that it has verified  
12 the physician's state license, board certification, training, and transplant continuing medical education  
13 and that the physician is currently a member in good standing of the hospital's medical staff.
- 14 4. The physician must have current board certification in ~~gastroenterology~~ transplant hepatology by the  
15 American Board of Internal Medicine, or a current pediatric transplant hepatology certification of  
16 added qualification by the American Board of Pediatrics or the Royal College of Physicians and  
17 Surgeons of Canada.

18  
19 In place of current certification in gastroenterology by the American Board of Internal Medicine, the  
20 American Board of Pediatrics, or the Royal College of Physicians and Surgeons of Canada, the  
21 physician must:

- 22
- 23 a. Be ineligible for American board certification.
- 24 b. Provide a plan for continuing education that is comparable to American board maintenance of  
25 certification. This plan must at least require that the physician obtains 60 hours of Category I  
26 continuing medical education (CME) credits with self-assessment that are relevant to the  
27 individual's practice every three years. Self-assessment is defined as a written or electronic  
28 question-and-answer exercise that assesses understanding of the material in the CME program.  
29 A score of 75% or higher must be obtained on self-assessments. Repeated attempts to achieve  
30 an acceptable self-assessment score are allowed. The transplant hospital must document  
31 completion of this continuing education.
- 32 c. Provide to the OPTN Contractor two letters of recommendation from directors of designated  
33 transplant programs not employed by the applying hospital. These letters must address:
  - 34 i. Why an exception is reasonable.
  - 35 ii. The physician's overall qualifications to act as a primary liver transplant physician.
  - 36 iii. The physician's personal integrity, honesty, and familiarity with and experience in adhering to  
37 OPTN obligations and compliance protocols.
  - 38 iv. Any other matters judged appropriate.

39  
40 If the physician has not adhered to the plan for maintaining continuing education or has not obtained  
41 the necessary CME credits with self-assessment, the transplant program will have a six-month grace  
42 period to address these deficiencies. If the physician has not fulfilled the requirements after the six-  
43 month grace period, and a key personnel change application has not been submitted, then the  
44 transplant program will be referred to the MPSC for appropriate action according to *Appendix L* of

45 these Bylaws. If the OPTN Contractor becomes aware that a primary physician has not been  
46 compliant for 12 months or more and deficiencies still exist, then the transplant program will not be  
47 given any grace period and will be referred to the MPSC for appropriate action according to *Appendix*  
48 *L* of these Bylaws.

- 49
- 50 5. The physician must have completed at least one of pathways listed below:
- 51 a. The 12-month transplant hepatology fellowship pathway, as described in *Section F.4.A. 12-month*  
52 *Transplant Hepatology Fellowship Pathway* below.
  - 53 b. The clinical experience pathway, as described in *Section F.4.B. Clinical Experience Pathway*  
54 below.
  - 55 c. The 3-year pediatric gastroenterology fellowship pathway, as described in *Section F.4.C. Three-*  
56 *year Pediatric Gastroenterology Fellowship Pathway* below.
  - 57 d. The 12-month pediatric transplant hepatology fellowship pathway, as described in *Section F.4.D.*  
58 *Pediatric Transplant Hepatology Fellowship Pathway* below.
  - 59 e. The combined pediatric gastroenterology or transplant hepatology training and experience  
60 pathway, as described in *Section F.4.E. Combined Pediatric Gastroenterology/Transplant*  
61 *Hepatology Training and Experience Pathway* below.
  - 62 f. The conditional approval pathway, as described in *Section F.3.F. Conditional Approval for*  
63 *Primary Transplant Physician* below, if the primary liver transplant physician changes at an  
64 approved liver transplant program.

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66 Pediatric liver transplant programs should have a board certified pediatrician who meets the criteria  
67 for primary liver transplant physician. If a qualified pediatric physician is not on staff at the program, a  
68 physician meeting the criteria as a primary liver transplant physician for adults can function as the  
69 primary liver transplant physician for the pediatric program, if a pediatric gastroenterologist is involved  
70 in the care of the pediatric liver transplant recipients.

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### 72 **C. Three-year Pediatric Gastroenterology Fellowship Pathway**

73 A physician can meet the requirements for primary liver transplant physician by completion of 3  
74 years of pediatric gastroenterology fellowship training as required by the American Board of  
75 Pediatrics in a program accredited by the Residency Review Committee for Pediatrics (RRC-Ped)  
76 of the Accreditation Council for Graduate Medical Education (ACGME). The training must contain  
77 at least 6 months of clinical care for transplant patients, and meet the following conditions:

- 78
- 79 1. The physician has a current pediatric transplant hepatology certification of added qualification  
80 board certification in pediatric gastroenterology by the American Board of Pediatrics, or the  
81 Royal College of Physicians and Surgeons of Canada.
  - 82 2. During the 3-year training period the physician was directly involved in the primary care of 10  
83 or more newly transplanted pediatric liver recipients and followed 20 newly transplanted liver  
84 recipients for a minimum of 3 months from the time of transplant, under the direct supervision  
85 of a qualified liver transplant physician along with a qualified liver transplant surgeon. The  
86 physician was also directly involved in the preoperative, peri-operative and post-operative  
87 care of 10 or more liver transplants in pediatric patients. The pediatric gastroenterology  
88 program director may elect to have a portion of the transplant experience carried out at  
89 another transplant service, to meet these requirements. This care must be documented in a  
90 log that includes the date of transplant, the medical record number or other unique identifier  
91 that can be verified by the OPTN Contractor. This recipient log must be signed by the training  
92 program director or the transplant program's primary transplant physician.
  - 93 3. The experience caring for pediatric patients occurred at a liver transplant program with a  
94 qualified liver transplant physician and a qualified liver transplant surgeon that performs an  
95 average of at least 10 liver transplants on pediatric patients per year.



- 96 4. The physician must have observed at least 3 liver procurements. The physician must have  
97 observed the evaluation, donation process, and management of these donors. These  
98 observations must be documented in a log that includes the date of procurement, location of  
99 the donor and Donor ID.
- 100 5. The physician must have observed at least 3 liver transplants. The observation of these  
101 transplants must be documented in a log that includes the transplant date, donor type, and  
102 medical record number or other unique identifier that can be verified by the OPTN Contractor.
- 103 6. The physician has maintained a current working knowledge of liver transplantation, defined  
104 as direct involvement in liver transplant patient care within the last 2 years. This includes the  
105 management of pediatric patients with end-stage liver disease acute liver failure, the  
106 selection of appropriate pediatric recipients for transplantation, donor selection,  
107 histocompatibility and tissue typing, immediate postoperative care including those issues of  
108 management unique to the pediatric recipient, fluid and electrolyte management, the use of  
109 immunosuppressive therapy in the pediatric recipient including side-effects of drugs and  
110 complications of immunosuppression, the effects of transplantation and immunosuppressive  
111 agents on growth and development, differential diagnosis of liver dysfunction in the allograft  
112 recipient, manifestation of rejection in the pediatric patient, histological interpretation of  
113 allograft biopsies, interpretation of ancillary tests for liver dysfunction, and long-term  
114 outpatient care of pediatric allograft recipients including management of hypertension,  
115 nutritional support, and drug dosage, including antibiotics, in the pediatric patient.
- 116 7. The following letters are submitted directly to the OPTN Contractor:
- 117 a. A letter from the director of the pediatric gastroenterology training program, and the  
118 qualified liver transplant physician and surgeon of the fellowship training program  
119 verifying that the physician has met the above requirements, and is qualified to act as a  
120 liver transplant physician and direct a liver transplant program.
- 121 b. A letter of recommendation from the fellowship training program's primary physician and  
122 transplant program director outlining the physician's overall qualifications to act as a  
123 primary transplant physician, as well as the physician's personal integrity, honesty, and  
124 familiarity with and experience in adhering to OPTN obligations, and any other matters  
125 judged appropriate. The MPSC may request additional recommendation letters from the  
126 primary physician, primary surgeon, director, or others affiliated with any transplant  
127 program previously served by the physician, at its discretion.
- 128 c. A letter from the physician that details the training and experience the physician gained in  
129 liver transplantation.

#### 131 **D. Pediatric Transplant Hepatology Fellowship Pathway**

132 The requirements for primary liver transplant physician can be met during a separate pediatric  
133 transplant hepatology fellowship if the following conditions are met:

- 134
- 135 1. The physician has a current pediatric transplant hepatology certification of added qualification  
136 current board certification in pediatric gastroenterology by the American Board of Pediatrics,  
137 the Royal College of Physicians and Surgeons of Canada, or is approved by the American  
138 Board of Pediatrics to take the certifying exam.
- 139 2. During the fellowship, the physician was directly involved in the primary care of 10 or more  
140 newly transplanted pediatric liver recipients and followed 20 newly transplanted liver  
141 recipients for at least 3 months from the time of transplant, under the direct supervision of a  
142 qualified liver transplant physician and in conjunction with a qualified liver transplant surgeon.  
143 The physician must have been directly involved in the pre-operative, peri-operative and post-

- 144 operative care of 10 or more liver transplants in pediatric patients. The pediatric  
145 gastroenterology program director may elect to have a portion of the transplant experience  
146 completed at another liver transplant program in order to meet these requirements. This care  
147 must be documented in a log that includes the date of transplant and the medical record  
148 number or other unique identifier that can be verified by the OPTN Contractor. This recipient  
149 log must be signed by the training program director or the transplant program primary  
150 transplant physician.
- 151 3. The experience in caring for pediatric liver patients occurred at a liver transplant program with  
152 a qualified liver transplant physician and surgeon that performs an average of at least 10  
153 pediatric liver transplants a year.
- 154 4. The physician has maintained a current working knowledge of liver transplantation, defined  
155 as direct involvement in liver transplant patient care within the last 2 years. This includes the  
156 management of pediatric patients with end-stage liver disease, acute liver failure, the  
157 selection of appropriate pediatric recipients for transplantation, donor selection,  
158 histocompatibility and tissue typing, immediate postoperative care including those issues of  
159 management unique to the pediatric recipient, fluid and electrolyte management, the use of  
160 immunosuppressive therapy in the pediatric recipient including side-effects of drugs and  
161 complications of immunosuppression, the effects of transplantation and immunosuppressive  
162 agents on growth and development, differential diagnosis of liver dysfunction in the allograft  
163 recipient, manifestation of rejection in the pediatric patient, histological interpretation of  
164 allograft biopsies, interpretation of ancillary tests for liver dysfunction, and long-term  
165 outpatient care of pediatric allograft recipients including management of hypertension,  
166 nutritional support, and drug dosage, including antibiotics, in the pediatric patient.
- 167 5. The physician must have observed at least 3 liver procurements. The physician must have  
168 observed the evaluation, donation process, and management of these donors. These  
169 observations must be documented in a log that includes the date of procurement, location of  
170 the donor and Donor ID.
- 171 6. The physician must have observed at least 3 liver transplants. The observation of these  
172 transplants must be documented in a log that includes the transplant date, donor type, and  
173 medical record number or other unique identifier that can be verified by the OPTN Contractor.
- 174 7. The following letters are submitted directly to the OPTN Contractor:
- 175 a. A letter from the director of the pediatric transplant hepatology training program, and the  
176 qualified liver transplant physician and surgeon of the fellowship training program  
177 verifying that the physician has met the above requirements, and is qualified to act as a  
178 liver transplant physician and direct a liver transplant program.
- 179 b. A letter of recommendation from the fellowship training program's primary physician and  
180 transplant program director outlining the physician's overall qualifications to act as a  
181 primary transplant physician, as well as the physician's personal integrity, honesty, and  
182 familiarity with and experience in adhering to OPTN obligations, and any other matters  
183 judged appropriate. The MPSC may request additional recommendation letters from the  
184 primary physician, primary surgeon, director, or others affiliated with any transplant  
185 program previously served by the physician, at its discretion.
- 186 c. A letter from the physician that details the training and experience the physician gained in  
187 liver transplantation.  
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**E. Combined Pediatric Gastroenterology/Transplant Hepatology Training and Experience Pathway**

A physician can meet the requirements for primary liver transplant physician if the following conditions are met:

1. The physician has a current pediatric transplant hepatology certification of added qualification ~~current board certification in pediatric gastroenterology~~ by the American Board of Pediatrics, the Royal College of Physicians and Surgeons of Canada, or is approved by the American Board of Pediatrics to take the certifying exam.
2. The physician gained a minimum of 2 years of experience during or after fellowship, or accumulated during both periods, at a liver transplant program.
3. During the 2 or more years of accumulated experience, the physician was directly involved in the primary care of 10 or more newly transplanted pediatric liver recipients and followed 20 newly transplanted liver recipients for a minimum of 6 months from the time of transplant, under the direct supervision of a qualified liver transplant physician and along with a qualified liver transplant surgeon. The physician must have been directly involved in the pre-operative, peri-operative and post-operative care of 10 or more pediatric liver transplants recipients. This care must be documented in a log that includes at the date of transplant and the medical record number or other unique identifier that can be verified by the OPTN Contractor. This recipient log must be signed by the training program director or the transplant program primary transplant physician.
4. The individual has maintained a current working knowledge of liver transplantation, defined as direct involvement in liver transplant patient care within the last 2 years. This includes the management of pediatric patients with end-stage liver disease, the selection of appropriate pediatric recipients for transplantation, donor selection, histocompatibility and tissue typing, immediate post-operative care including those issues of management unique to the pediatric recipient, fluid and electrolyte management, the use of immunosuppressive therapy in the pediatric recipient including side-effects of drugs and complications of immunosuppression, the effects of transplantation and immunosuppressive agents on growth and development, differential diagnosis of liver dysfunction in the allograft recipient, manifestation of rejection in the pediatric patient, histological interpretation of allograft biopsies, interpretation of ancillary tests for liver dysfunction, and long-term outpatient care of pediatric allograft recipients including management of hypertension, nutritional support, and drug dosage, including antibiotics, in the pediatric patient.
5. The physician must have observed at least 3 liver procurements. The physician must have observed the evaluation, the donation process, and the management of these donors. These observations must be documented in a log that includes the date of procurement, location of the donor, and Donor ID.
6. The physician must have observed at least 3 liver transplants. The observation of these transplants must be documented in a log that includes the transplant date, donor type, and medical record number or other unique identifier that can be verified by the OPTN Contractor.
7. The following letters are submitted directly to the OPTN Contractor:
  - a. A letter from the qualified liver transplant physician and surgeon who have been directly involved with the physician documenting the physician's experience and competence.
  - b. A letter of recommendation from the primary physician and transplant program director at the fellowship training program or transplant program last served by the physician outlining the physician's overall qualifications to act as a primary transplant physician, as well as the physician's personal integrity, honesty, and familiarity with and experience in

237                    adhering to OPTN obligations, and any other matters judged appropriate. The MPSC  
238                    may request additional recommendation letters from the primary physician, primary  
239                    surgeon, director, or others affiliated with any transplant program previously served by  
240                    the physician, at its discretion.

241                    c. A letter from the physician that details the training and experience the physician gained in  
242                    liver transplantation.

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