IN THE SUPREME COURT OF THE
STATE OF OREGON

Joseph L. SMITH,
Petitioner on Review,
v.
PROVIDENCE HEALTH & SERVICES - OREGON,
dba Providence Hood River Memorial Hospital,
dba Providence Medical Group;
Linda L. Desitter, MD;
Michael R. Harris, MD;
Hood River Emergency Physicians, LLC;
and Hood River Medical Group, PC;
Respondents on Review,
and
PROVIDENCE MEDICAL GROUP,
fka Hood River Medical Group, PC;
and Hood River Medical Group, PC,
Defendants.

(CC 130202067; CA A155336; SC S063358)

On review from the Court of Appeals.*

Argued and submitted March 4, 2016, at Willamette University College of Law, Salem, Oregon.

Stephen C. Hendricks, Hendricks Law Firm, PC, Portland, argued the cause and filed the brief for petitioner on review.

George S. Pitcher, Lewis Brisbois Bisgaard & Smith LLP, Portland, argued the cause and filed the brief for respondent on review Providence Health & Services - Oregon. Also on the brief was Rachel A. Robinson.

Lindsey H. Hughes, Keating Jones Hughes, PC, Portland, argued the cause and filed the brief for respondents on review Michael R. Harris, MD, and Hood River Medical Group, PC. Also on the brief was Hillary A. Taylor.

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* Appeal from Multnomah County Circuit Court, Nan G. Waller, Judge. 270 Or App 325, 347 P3d 820 (2015).

Jay Beattie, Lindsay Hart, LLP, Portland, argued the cause and filed the brief for respondents on review Linda L. Desitter, MD, and Hood River Emergency Physicians.

Roy Pulvers, Holland & Knight LLP, Portland, filed the brief for *amici curiae* Oregon Medical Association and American Medical Association.

Travis Eiva, Eugene, filed the brief for *amicus curiae* Oregon Trial Lawyers Association. Also on the brief was Dan Bartz.

Michael T. Stone, Brisbee & Stockton LLC, Hillsboro, filed the brief for *amicus curiae* Oregon Association of Defense Counsel.

Before Balmer, Chief Justice, and Kistler, Walters, Landau, Brewer, Nakamoto, and Flynn, Justices.**

NAKAMOTO, J.

The decision of the Court of Appeals is reversed. The judgment of the circuit court is reversed, and the case is remanded to the circuit court for further proceedings.

** Baldwin, J., retired March 31, 2017, and did not participate in the decision of this case.

NAKAMOTO, J.

After suffering permanent brain damage from a stroke, plaintiff Joseph Smith brought this medical negligence action, alleging that, because doctors had not taken proper steps to follow up on his complaints of stroke symptoms, he lost a chance for treatment that, in one-third of cases, provides a patient with no or reduced complications following the stroke. Reviewing the complaint on its face, the trial court agreed with defendants that plaintiff had failed to state a claim under Oregon law. The court entered a judgment dismissing the complaint with prejudice, which the Court of Appeals affirmed. *Smith v. Providence Health & Services - Oregon*, 270 Or App 325, 347 P3d 820 (2015). On review, the question presented is whether Oregon law permits a plaintiff who has suffered an adverse medical outcome resulting in physical harm to state a common-law medical negligence claim by alleging that the defendant negligently caused a loss of his or her chance at recovery. As explained below, we conclude, as a matter of first impression, that a medical negligence claim based on a loss-of-chance theory of injury in the circumstances presented is cognizable under Oregon common law. Accordingly, we reverse and remand for further proceedings.

I. FACTS AND PROCEDURAL HISTORY

Because the trial court dismissed the action at the pleading stage, we describe the facts by assuming the truth of facts that plaintiff alleged in his complaint and by giving him the benefit of reasonable inferences from those facts. *Lowe v. Philip Morris USA, Inc.*, 344 Or 403, 407 n 1, 183 P3d 181 (2008). On a Friday afternoon in 2011, plaintiff, then 49 years old, went to the emergency room at Providence Hood River Memorial Hospital, which defendant Providence Health & Services - Oregon operated. He arrived in the emergency room less than two hours after he began experiencing visual difficulties, confusion, slurred speech, and headache. Plaintiff was worried that he might be having a stroke.

Defendant Dessiter, a physician affiliated with defendant Hood River Emergency Physicians, LLC, attended plaintiff in the emergency room. Dessiter did not perform

a complete physical examination or thorough neurological examination of plaintiff. Plaintiff underwent a CT scan, which showed no bleeding in his brain, making him a candidate for "TPA treatment of a stroke."[1] A radiologist recommended that, if symptoms persisted, an MRI should be considered. Dessiter concluded that plaintiff's symptoms were caused by taking a sleep aid, told him he needed to have his eyes examined, and discharged him. She did not advise him to take aspirin.

On Saturday night, when Dessiter was again working, plaintiff returned to the Providence emergency room. Plaintiff reported that the pain in his head had significantly increased and he was still having visual problems. Again, Dessiter did not perform a complete physical examination and did not perform a thorough neurological examination. She diagnosed plaintiff with a mild headache and visual disturbance and gave him a prescription for Vicodin. She again advised him to see an eye doctor. She did not advise plaintiff to take aspirin.

On Monday, plaintiff attended a follow-up appointment with defendant Harris, a family practice physician affiliated with defendant Hood River Medical Group, PC. Harris ordered an MRI, but not on an expedited basis. He did not advise plaintiff to take aspirin.

When an MRI was done at the end of the week, it showed that plaintiff had suffered substantial brain damage from a stroke. Plaintiff's stroke-related injuries are permanent. Among other things, he now has slurred speech, limitations on his ability to perform activities of daily living, and cognitive impairments that prevent him from working.

Plaintiff sued the doctors who had attended him, their respective medical groups, and Providence for medical negligence, alleging a loss-of-chance negligence theory. In his second amended complaint, plaintiff alleged that Providence and Dessiter were negligent in failing to conduct

[1] The abbreviation TPA stands for tissue plasminogen activator. *Stedman's Medical Dictionary* 1850 (27th ed 2000). TPA "is a thrombolytic agent that helps to break apart blood clots." *Joshi v. Providence Health System*, 342 Or 152, 156, 149 P3d 1164 (2006).

thorough physical and neurological examinations, to order an MRI, to start plaintiff on aspirin, and to take various other actions. Plaintiff alleged that Providence and Harris were negligent in failing to order an MRI on an expedited basis and to start plaintiff on aspirin. Plaintiff then alleged that, "[a]s a result of the negligence of [Providence, Dessiter, and Harris], on a more probable than not basis, [plaintiff] lost a chance for treatment which, 33 percent of the time, provides a much better outcome, with reduced or no stroke symptoms."[2] Plaintiff further alleged that, "[a]s a result of defendants' negligence and his injuries," he "lost his ability to work" and "has serious and permanent injuries." He requested damages "for lost wages or impairment of earning capacity" and "non-economic damages."

In a professional negligence claim, a plaintiff must allege and prove the following: "(1) a duty that runs from the defendant to the plaintiff; (2) a breach of that duty; (3) a resulting harm to the plaintiff measurable in damages; and (4) causation, *i.e.*, a causal link between the breach of duty and the harm." *Zehr v. Haugen*, 318 Or 647, 653-54, 871 P2d 1006 (1994). Ultimately, the plaintiff must prove causation by a "reasonable probability." *Sims v. Dixon*, 224 Or 45, 48, 355 P2d 478 (1960).

Dessiter and her medical group, Harris and his medical group, and Providence filed motions to dismiss plaintiff's complaint under ORCP 21 A(8). All defendants argued that plaintiff had failed to allege ultimate facts sufficient to constitute a claim on two grounds. First, they argued, plaintiff had not alleged a recognized harm because Oregon law does not permit recovery for loss of chance. Defendants asserted that this court had rejected the loss-of-chance theory in *Joshi v. Providence Health System*, 342 Or 152, 149 P3d 1164 (2006), a statutory wrongful death case in which the personal representative of a patient alleged that health care providers had failed to diagnose the patient's stroke, leading to his death. *Id.* at 155. Second, defendants argued that plaintiff's negligence theory, if recognized in Oregon,

[2] Plaintiff's complaint contains two identical allegations that "Providence and Dessiter" caused the loss of the chance, but the parties have treated the second instance as an allegation that Harris caused plaintiff to lose the chance.

would subvert the requirement that a plaintiff in a medical malpractice case must plead and prove a causal connection between the defendant's breach of duty and the plaintiff's injuries.

The trial court granted defendants' motions to dismiss but allowed plaintiff 10 days in which to replead the complaint. When plaintiff failed to amend his complaint, the trial court entered a general judgment dismissing the action with prejudice.

Before the Court of Appeals, the parties again disputed whether loss of chance had been rejected or recognized as a negligence theory in Oregon and whether plaintiff's theory conflicted with pleading requirements for the element of causation in a professional negligence claim. Citing *Harris v. Kissling*, 80 Or App 5, 721 P2d 838 (1986), and distinguishing *Joshi*, plaintiff argued that Oregon recognizes loss of chance "in medical negligence actions for injuries" and that many other states allow claims for loss of chance.

The Court of Appeals resolved plaintiff's appeal based on both this court's decision in *Joshi* and plaintiff's allegations concerning causation. In a footnote, the Court of Appeals declined plaintiff's invitation to conclude that the loss of a chance for an often-effective treatment and recovery is the cognizable harm caused by a negligent failure to act. *Smith*, 224 Or App at 329 & n 3. Instead, the court viewed plaintiff's injury as his stroke-related brain damage and determined that the causation requirement for the wrongful death statute in *Joshi* was the same requirement demanded by the common law for causation in a medical negligence claim. *Smith*, 270 Or App at 331-32. The court concluded that plaintiff's allegation that he lost a 33 percent chance for a better outcome was insufficient to allege that "there is a reasonable probability that defendants' alleged negligent omissions resulted in his injury." *Id.* at 332. Accordingly, the court affirmed. *Id.*

Plaintiff sought review, arguing, in part, that the Court of Appeals erroneously had rejected loss of chance as a separate compensable injury, which then led the court to conduct an off-kilter analysis of causation. We granted review to decide whether Oregon law permits plaintiff, who

has suffered physical harm, to state a common-law medical negligence claim by alleging that defendants negligently caused the loss of his 33 percent chance at recovery from his stroke.

II. ANALYSIS

A. *Preservation*

Before reaching the parties' substantive arguments, we address defendants' contention that plaintiff failed to adequately preserve his argument that the loss of a 50 percent or lesser chance for medical recovery is a discrete, compensable harm. Defendants' arguments, which have morphed over time, are unavailing.

Defendants first raised concerns about preservation before this court, when opposing plaintiff's petition for review. At that point, defendants acknowledged that, in the trial court, plaintiff had argued in favor of recognizing loss of chance as an injury. Even so, defendants contended, plaintiff's reference to *Dickhoff ex rel Dickhoff v. Green*, 836 NW2d 321, 329-30 (Minn 2013) (approving the loss-of-chance theory), was too "skimpy and opaque."

Defendants since appear to have pushed that argument to the sidelines, and rightly so. The question whether an argument has been preserved "inevitably will turn on whether, given the particular record of a case, the court concludes that the policies underlying the [preservation] rule have been sufficiently served." *State v. Parkins*, 346 Or 333, 341, 211 P3d 262 (2009). This court has also explained that two major policies underlie the rule of preservation: judicial efficiency and fairness. *Peeples v. Lampert*, 345 Or 209, 219-20, 191 P3d 637 (2008). Those preservation policies were served in this case: First, in his complaint, plaintiff expressly alleged that he lost his chance for recovery. Second, in opposing defendants' Rule 21 motions, plaintiff argued (among other things) that "the loss of his chance for a better outcome is absolutely an injury to his person" and asked the trial court "to allow him to present that harm to a jury."

More recently, in their brief before this court, defendants assert that the issue whether the loss of the chance

for recovery is a compensable injury was not before the trial court, because plaintiff had failed to clearly allege a compensable injury. As defendants view it, the complaint had to, but did not, contain the proper allegation of damages, namely, damages for emotional or psychic injury experienced because of losing a chance of recovery. Instead, defendants assert, the only claim plaintiff presented was one for "physical injury damages." Although their argument sounds like a challenge to the adequacy of plaintiff's pleading, defendants characterize it as a preservation argument. Regardless of whether we agree, that position is not well taken.

First, defendants' position depends on two faulty premises: (1) the only possible kind of damage that a plaintiff who proves a loss of chance can assert is damage due to emotional or psychic injury and (2) plaintiff did not allege a right to recover those sorts of noneconomic damages. As we discuss later, courts have allowed other damage theories under the auspices of a loss-of-chance theory. And, even were defendants correct that only noneconomic damages are cognizable upon proof of a defendant's liability for a loss of chance, plaintiff alleged that he had suffered a specific amount of "non-economic damages." Moreover, defendants' position presumes that the trial court dismissed based on the nuts and bolts of the pleading, yet the court dismissed the action because it rejected the very idea that a loss-of-chance theory of recovery was available in Oregon. Thus, the availability of loss of chance as a theory of recovery was squarely before the trial court and the Court of Appeals and is preserved for our review.

B. *An Issue of First Impression*

Throughout the litigation, the parties have disputed whether, in *Joshi*, this court already resolved the question whether a loss of chance is cognizable under Oregon law, and so we begin by clarifying the matter. Plaintiff is correct that we have not yet decided whether an injured plaintiff alleging common-law medical malpractice may recover for loss of a chance at a better medical outcome. The feature distinguishing *Joshi* from this case is the wrongful death statute, ORS 30.020, which was at the heart of that case.

In *Joshi*, the plaintiff brought a wrongful death action against multiple health care providers, alleging that they had failed to timely diagnose and treat her husband's stroke with medications and that their negligence led to his death. 342 Or at 155. The trial court directed a verdict in favor of the defendants when the plaintiff's medical expert testified that timely administration of the medications would have increased the decedent's chance of survival by, at most, 30 percent. *Id.* at 156. One of the questions on review before this court was whether the expert's testimony had created a jury question as to causation. *Id.* at 157.

Our decision turned on the provision in ORS 30.020 that a wrongful death action can be maintained if "the death of a person is *caused by* the wrongful act or omission of another." (Emphasis added.) After examining the text and context of the wrongful death statute, this court held in *Joshi* that the statute "requires that a plaintiff prove that a defendant's negligent act or omission *caused* the decedent's *death*," *id.* at 163 (emphasis in original), not an increase in the risk of death, *id.* at 164. Because the expert could testify only that defendants' conduct had increased the risk of death but not that, to a reasonable probability, defendants' conduct had caused the death, the court concluded that the plaintiff had failed to adduce evidence to establish an element of her claim. *Id.* at 164. As we noted, "[*a*]*lthough deprivation of a 30 percent chance of survival may constitute an injury*, the injury that is compensable under ORS 30.020 is death." 342 Or at 164 (emphasis added). In contrast, this case is not bound by a statute that requires that plaintiff prove that defendants caused a specific injury. Rather, the issue presented concerns a claim for medical negligence under Oregon's common law.

In the present case, plaintiff argues that loss of chance is not an aspect of causation, but rather is a distinct type of injury or harm, and one that numerous jurisdictions have recognized in common-law negligence cases involving medical malpractice. The Court of Appeals rejected that argument without discussion, *Smith*, 270 Or App at 329 n 3, citing *Lowe* and *Howerton v. Pfaff*, 246 Or 341, 347, 425 P2d 533 (1967). Neither of those cases, however, addressed whether loss of chance of a better medical outcome in the

context of a medical malpractice claim could constitute a harm or injury under Oregon common law.

In *Lowe*, the alleged injury was the plaintiff's increased risk of developing lung cancer from having consumed the defendant's cigarette products. 344 Or at 407. The plaintiff did not allege physical harm or seek emotional distress damages; she sought to recover the costs of periodic medical screening for cancer. *Id.* at 409. One of the issues presented was "whether a significantly increased risk of future physical injury is a sufficient harm to state a negligence claim." *Id.* Following established precedent, this court concluded that a threat of future physical harm is not, in itself, actionable. *Id.* at 410.

In rejecting the plaintiff's argument that the issue was similar to the loss-of-chance issue left open in *Joshi*, the *Lowe* court made a passing statement that the Court of Appeals understood as foreclosing plaintiff's lost-chance-as-injury theory in this case. Specifically, in *Lowe*, this court first described the issue left open in *Joshi* as whether "deprivation of a 30 percent chance of survival may constitute an *injury*" outside the context of the wrongful death statute, and then as "whether 'deprivation of a 30 percent chance of survival' would be sufficient proof of *causation* if the plaintiff suffered an injury that did not lead to death." *Lowe*, 344 Or at 413 (quoting *Joshi*, 342 Or at 164) (emphasis added). This court then added that that statement in *Joshi* "goes to the causal connection necessary to prove negligence, not the type of injury necessary to state a negligence claim." *Lowe*, 344 Or at 413. The Court of Appeals appears to have understood *Lowe* as signaling that a lost chance must be understood in terms of causation.

However, this court did not tacitly conclude in *Lowe* that all loss-of-chance theories must be considered as theories of causation rather than injury. Rather, as the *Lowe* court more precisely said, the "only question" in *Joshi* was "whether the evidence was sufficient, for the purpose of the wrongful death act, to find the necessary causal connection between the defendant's negligence and the patient's death." *Lowe*, 344 Or at 413. In other words, in *Joshi*, we decided a causation issue that arose by virtue of the injury

specified in the wrongful death statute, but we left open whether deprivation of a chance of survival could, in fact, constitute an "injury," or satisfy causation requirements, in other contexts. *See Joshi*, 342 Or at 164 ("Although deprivation of a 30 percent chance of survival may constitute an injury, the injury that is compensable under ORS 30.020 is death.").

Nor did this court reject a loss-of-chance theory of medical malpractice in *Howerton*. That case concerned whether the plaintiff's health problem was caused by an automobile accident. The plaintiff had been treated for neck strain near the time of the accident, and then considerably later sought treatment for a hernia in his groin. 246 Or at 343. This court concluded that the plaintiff had not adduced sufficient proof of causation, given his physician's testimony that it was a mere "possibility" that the hernia was a result of the accident and noting that a possibility was not the same as probability. *Id.* at 346. That case stands for the unremarkable proposition that causation must be established with probability or reasonable certainty. It provides no support for a conclusion that loss of chance of a better medical outcome has been rejected as a theory of *injury* for a medical malpractice claim under Oregon common law. Thus, we are presented with an issue of first impression in our court.

C. *Loss of Chance in Common-Law Medical Negligence Claims*

The present case concerns whether the loss-of-chance theory of injury should be cognizable in the context of common-law negligence claims of medical malpractice in Oregon. The loss-of-chance theory is responsive to cases like this one, in which defendants undertook care of plaintiff when he presented with symptoms of stroke, they breached the duty to plaintiff by performing below the standard of care, plaintiff suffered brain damage, and defendants caused him to lose a 33 percent chance at recovering from the stroke, *i.e.*, plaintiff does not allege (and cannot prove) that defendants caused his brain damage given that his chance of recovery with proper treatment was not greater than 50 percent.

Loss of chance as a theory of recovery for negligence, and in particular for medical malpractice, has gained traction in the last half-century. At this point, courts in most states have reached the issue, and more than half of the jurisdictions in the United States that have considered the issue have embraced the theory, at least to some extent. *See* Lauren Guest, David Schap, and Thi Tran, *The "Loss of Chance" Rule as a Special Category of Damages in Medical Malpractice: A State-by-State Analysis,* 21 J Legal Econ 53, 58-60 (2015) (reviewing case law as of 2014 and concluding that 41 states had addressed loss of chance, with 24 states having adopted some version of the theory); Steven L. Koch, *Whose Loss is it Anyway? Effects of the "Lost Chance" Doctrine on Civil Litigation and Medical Malpractice Insurance*, 88 NC L Rev 595, 606-09 (2010) (citing cases). We review the development of the loss-of-chance theory in medical malpractice actions to provide context for our analysis of whether and how plaintiff may use that theory.

An early iteration of the basis for the loss-of-chance theory, and one that is widely cited, is found in *Hicks v. United States*, 368 F2d 626 (4th Cir 1966). That case, which involved a negligent failure to diagnose a condition that led to the death of the patient, applied Virginia law. In rejecting the defendant's lack-of-causation argument, the court explained that a negligent doctor must answer for a patient's lost chance of survival:

> "When a defendant's negligent action or inaction has effectively terminated a person's chance of survival, it does not lie in the defendant's mouth to raise conjectures as to the measure of the chances that he has put beyond the possibility of realization. If there was any substantial possibility of survival and the defendant has destroyed it, he is answerable. Rarely is it possible to demonstrate to an absolute certainty what would have happened in circumstances that the wrongdoer did not allow to come to pass. The law does not in the existing circumstances require the plaintiff to show to a certainty that the patient would have lived had she been hospitalized and operated on promptly."

Id. at 632. Although *Hicks*, unlike classic loss-of-chance cases discussed below, did not actually involve proof of less than a 51 percent chance that the correct diagnosis would

have led to a better medical outcome, *id.*, it nonetheless has come to be cited for the proposition that traditional notions of "more likely than not" causation pose a problematic barrier to recovery by patients who have experienced poor medical outcomes due to a doctor's failure to diagnose and that other theories of recovery may be viable in that context.

One of the earliest cases that explicitly recognized loss of chance as a distinct theory of recovery in medical malpractice was *Hamil v. Bashline*, 481 Pa 256, 392 A2d 1280 (1978). In that case, the plaintiff put on expert testimony that the decedent had a 75 percent chance of surviving his heart attack with proper treatment, which the defendant countered with evidence that the decedent's death was imminent, regardless of treatment. The trial court directed a verdict in the defendant's favor after concluding that the plaintiff had failed to establish that the defendant's proven negligence was the proximate cause of the death. *Id.* at 263, 392 A2d at 1283.

On appeal, the Pennsylvania Supreme Court analyzed the question in terms of the quantum of proof necessary to establish causation, like some other courts addressing loss of chance, particularly earlier in the development of the doctrine. Relying on the rationale from *Hicks* as well as Section 323(a) of the *Restatement (Second) of Torts*,[3] the Pennsylvania Supreme Court described the loss-of-chance theory as allowing "the issue to go to the jury upon a less than normal threshold of proof." *Hamil*, 481 Pa at 271, 392 A2d at 1287-88. The court therefore held that such a claim could go forward if there was evidence that the "increased

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[3] Section 323, entitled "Negligent Performance of Undertaking to Render Services," provides:

> "One who undertakes, gratuitously or for consideration, to render services to another which he should recognize as necessary for the protection of the other's person or things, is subject to liability to the other for physical harm resulting from his failure to exercise reasonable care to perform his undertaking, if
>
> "(a) his failure to exercise such care *increases the risk of such harm*, or
>
> "(b) the harm is suffered because of the other's reliance upon the undertaking."

(Emphasis added.)

risk" was a "substantial factor in bringing about the resulting harm." *Id.* at 272, 192 A2d at 1288.

A small number of courts in other jurisdictions—for example, *Delaney v. Cade*, 255 Kan 199, 218, 873 P2d 175, 187 (1994), and *McKellips v. Saint Francis Hosp., Inc.*, 741 P2d 467, 475 (Okla 1987)—have similarly characterized loss-of chance theories of recovery in the medical malpractice context as involving a relaxation of the causation standard. Those jurisdictions use a test for the causal connection between the patient's ultimate physical harm and the doctor's negligence that substitutes "substantial factor" or "substantial probability" for "preponderance of the evidence," that is, more-likely-than-not or greater-than-50-percent causation. *See generally* Guest *et al*, 21 J Legal Econ at 56-57 (describing "substantial probability" theory of causation). The "relaxed causation" approach to loss of chance, however, is in the minority, and plaintiff does not rely on it.

The injury-based analytical approach—the one urged by plaintiff in this case—is favored by commentators and the majority of courts in other jurisdictions that have approved of the loss-of-chance doctrine. That approach has as its foundation the recognition of the lost chance as an injury in itself.

For example, the author of an influential 1981 law journal article posited that loss of chance need not be viewed in terms of causation, but, rather, should be analyzed in terms of how to value the lost chance itself. Joseph H. King, Jr., *Causation, Valuation, and Chance in Personal Injury Torts Involving Preexisting Conditions and Future Consequences*, 90 Yale LJ 1353 (1981). Professor King maintained that the loss of chance of achieving a favorable outcome "should be compensable and should be valued appropriately, rather than treated as an all-or-nothing proposition" dependent on proof of a greater-than-50-percent chance of a better outcome absent the alleged malpractice. *Id.* at 1354. He argued that, in a medical malpractice situation in which a patient presents with symptoms of a condition and a physician negligently fails to diagnose and treat that condition, the preexisting medical condition (which clearly was not caused by the negligence) is merely something that is taken into

account when valuing the harm that actually was caused by the negligent failure to diagnose: "The defendant should be subject to liability only to the extent that he tortiously contributed to the harm by allowing a preexisting condition to progress[.]" *Id.* at 1360. The author provided the following example:

> "[C]onsider the case in which a doctor negligently fails to diagnose a patient's cancerous condition until it has become inoperable. Assume further that even with a timely diagnosis the patient would have had only a 30% chance of recovering from the disease and surviving over the long term. *** [A loss-of-chance approach] would allow recovery for the loss of the chance of cure even though the chance was not better than even. The probability of long-term survival would be reflected in the amount of damages awarded for the loss of the chance. While the plaintiff here could not prove by a preponderance of the evidence that he was denied a cure by the defendant's negligence, he could show by a preponderance that he was deprived of a 30% chance of a cure."

Id. at 1363-64.

Professor King acknowledged that, at the time his 1981 article was published, "few personal injury cases have recognized, even implicitly, the loss of chance as a compensable interest valued in its own right." *Id.* at 1365-66.[4] However, he went on to explain that valuation of a loss of chance was "well within the competency of science," noting that "[o]ne may deduce the probability figure from so-called 'relative frequency' by looking at the way in which the same or similar forces operated in the past." *Id.* at 1386 (footnote omitted). King also explained that treating loss of chance as a theory of injury does not dispense with causation requirements, but instead shifts the causation inquiry to whether a defendant caused the opportunity for a better outcome to be lost—as opposed to the traditional negligence claim requiring the plaintiff to establish that the defendant caused the physical harm. King, 90 Yale LJ at 1395; *see also* Joseph H.

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[4] Interestingly enough, one of the cases the author cited as implicitly recognizing loss of chance in terms of valuation was *Feist v. Sears, Roebuck & Co.*, 267 Or 402, 517 P2d 675 (1973). King, 90 Yale LJ at 1366 n 40, 1380 n 96. *Feist* is discussed more extensively below. *See* 361 Or at 484.

King, Jr., *"Reduction of Likelihood" Reformulation and Other Retrofitting of the Loss-of-a-Chance Doctrine*, 28 U Mem L Rev 491 (1997) (discussing evolution of loss-of-chance as a theory of injury).

Over twenty state courts have agreed with the argument that King makes in his articles and have permitted plaintiffs to assert a lost chance as a cognizable injury in a medical malpractice claim. *See* Alice Férot, *The Theory of Loss of Chance: Between Reticence and Acceptance*, 8 FIU L Rev 591, 610 (2013) (listing cases); *Lord v. Lovett*, 146 NH 232, 770 A2d 1103 (2001); *Dickhoff*, 836 NW2d 321. For example, in *Matsuyama v. Birnbaum*, 452 Mass 1, 890 NE2d 819 (2008), the Massachusetts Supreme Judicial Court engaged in a comprehensive analysis of the loss-of-chance theory. Ultimately, it concluded that such claims should be cognizable, relying in part on Professor King's articles described above, as well as the rationale explicated by the court in *Hicks* and the growing body of case law from many jurisdictions recognizing the doctrine. The court adopted the loss-of-chance theory of injury, limited to the medical malpractice context, and explained that it did not, in fact, relieve a plaintiff of the burden to prove causation:

> "[Massachusetts common law] requires that plaintiffs establish causation by a preponderance of the evidence. In order to prove loss of chance, a plaintiff must prove by a preponderance of the evidence that the physician's negligence caused the plaintiff's likelihood of achieving a more favorable outcome to be diminished. That is, the plaintiff must prove by a preponderance of the evidence that the physician's negligence caused the plaintiff's injury, where the injury consists of the diminished likelihood of achieving a more favorable medical outcome."

Matsuyama, 452 Mass at 17, 890 NE2d at 832 (citations omitted). In 2013, the Minnesota Supreme Court agreed with the Massachusetts court and King's critique of the "all or nothing" approach to liability, explaining that it was "recognizing that an injury that has always existed is now capable of being proven to a reasonable degree of certainty" in medical malpractice cases. *Dickhoff*, 836 NW2d at 333-35.

A significant number of states, however, have rejected the loss-of-chance theory of recovery in medical malpractice actions and instead adhere to a traditional "all-or-nothing approach." That approach requires the plaintiff to establish that the patient would have had a better than 50 percent chance of survival or a favorable outcome, which then triggers a right to recover all damages resulting from the defendant's malpractice. *See* Guest *et al*, 21 J Legal Econ at 59 (listing 17 states, but two states—Oregon and New Hampshire—should not be on the list).

As Professor King recognized, much of the early case law addressing the loss-of-chance theory in negligence cases considered solely whether the theory comported with the traditional requirement that the plaintiff must prove, by a preponderance of the evidence, that the medical negligence caused the physical harm in order to recover damages. *See, e.g.*, *Cooper v. Sisters of Charity of Cincinnati, Inc.*, 27 Ohio St 2d 242, 251, 272 NE2d 97, 103 (1971) (holding, as "the better rule," that "to comport with the standard of proof of proximate cause," the plaintiff had to prove that the defendant's negligence, in probability, caused the death). But even in more recent cases in the 1990s and 2000s in which courts have rejected the loss-of-chance theory of injury, the rationale turned on the necessity of proving causation in a negligence claim. *See, e.g.*, *Kilpatrick v. Bryant*, 868 SW2d 594 (Tenn 1993). In that case, the Tennessee Supreme Court concluded that "plaintiffs ought to be required to show that the negligence more likely than not was the cause in fact of the unfavorable medical result," explaining its holding in terms of traditional causation:

> "Although a plaintiff can recover for harm stemming from the aggravation of an existing illness, the plaintiff may not recover damages for the loss of a less than even chance of obtaining a more favorable medical result. The traditional test for cause in fact prevents recovery because the patient's condition would more likely than not be the same even if the defendant had not been negligent."

868 SW2d at 602-03. More recently, the Connecticut Supreme Court similarly held in *Boone v. William W. Backus Hospital*, 272 Conn 551, 574, 864 A2d 1, 18 (2005), that,

to establish a medical malpractice claim, a plaintiff must prove that the decedent had at least a 51 percent chance of survival—in other words, that it was more likely than not that the negligent conduct caused "the actual outcome," or death.

When accepted, the loss-of-chance theory of injury in tort cases has been largely limited to the medical malpractice arena. The primary reason for that limitation is the recognition that, in the context of medical malpractice, it is the alleged medical malpractice itself that makes it impossible for the plaintiff to prove that he or she would have achieved that better outcome. Thus, as Professor King has explained, the loss-of-chance doctrine should apply "for reasons of fairness," when, but for the tortious conduct, "it would not have been necessary to grapple with the imponderables of chance. Fate would have run its course." King, 90 Yale LJ at 1377. Stated another way, "the defendant's tortious conduct was the reason it was not feasible to determine whether or not the more favorable outcome would have materialized but for the tortious conduct." King, 28 U Mem L Rev at 543. *See also Matsuyama*, 452 Mass at 14, 890 NE2d at 831 (Courts adopting the doctrine recognize that "it is particularly unjust to deny the person recovery for being unable 'to demonstrate to an absolute certainty what would have happened in circumstances that the wrongdoer did not allow to come to pass.'" (Quoting *Hicks*, 368 F2d at 632.)); *Restatement (Third) of Torts* § 26 comment n (2005) (loss of chance "serves to ameliorate what would otherwise be insurmountable problems of proof"). Some courts have also recognized that the nature of the physician-patient relationship provides a foundation for recognizing loss of chance as an injury. *See, e.g.*, *Matsuyama*, 452 Mass at 20, 890 NE2d at 835 ("medical negligence that harms the patient's chances of a more favorable outcome contravenes the expectation at the heart of the doctor-patient relationship that the physician will take every reasonable measure to obtain an optimal outcome for the patient" (quotation and citation omitted)); *accord Restatement (Third) of Torts* § 26 comment n (the very reason for the contractual relationship between physician and patient is to obtain an optimal patient outcome).

The loss-of-chance theory also functions in the context of medical malpractice actions because, at least in some instances of alleged negligence, ample reliable scientific evidence about the statistical probability of various medical outcomes is available. *See, e.g.*, *Matsuyama*, 452 Mass at 20, 890 NE2d at 835 ("reliable expert evidence establishing loss of chance is more likely to be available in a medical malpractice case than in some other domains"). That is, the plaintiff can demonstrate, through the use of expert testimony, the statistical likelihood of a better medical outcome but for the negligent conduct.

D. *Oregon Common-Law Medical Malpractice Claims*

Defendants contend that Oregon common-law medical negligence cases are incompatible with, and therefore foreclose recognition of, a loss-of-chance theory of injury or harm. They first assert that, regardless of case law nationally, this court has not recognized a loss-of-chance theory in the past and, indeed, has consistently declined to recognize what defendant describes as "new common law claims or injuries" in cases involving common-law negligence. Defendants further posit that, to recognize loss of chance as a theory of injury in medical negligence cases, this court would need to overrule precedent, but plaintiff has not satisfied the conditions under which this court overrules such precedent. *See G.L. v. Kaiser Foundation Hospitals, Inc.*, 306 Or 54, 59, 757 P2d 1347 (1988) (party seeking a change in court's common law must show that earlier cases were inadequately considered or wrong, that other law has altered some essential legal element assumed in the earlier cases, or that the earlier rule was based on factual assumptions that have changed). Accordingly, we turn to the cases on which defendants rely.

The mainstay of defendants' arguments is a pair of this court's cases from the early twentieth century: *Horn v. National Hospital Association*, 169 Or 654, 131 P2d 455 (1942), and *Lippold v. Kidd*, 126 Or 160, 269 P 210 (1928). We address those cases in detail to assess defendants' arguments and conclude that neither one preordains our decision in this case.

Horn, like the present case, involved allegations of negligent failure to diagnose. In that case, the plaintiff alleged that the defendant was negligent in failing to diagnose a gall bladder condition. The six-week delay in diagnosis led to a delay of three months before the plaintiff underwent gall bladder surgery. *Id.* at 659-60, 665. In the years immediately after the surgery, the plaintiff experienced numerous health problems, including psychiatric problems, thyroid problems, and irritable bowel syndrome. *Id.* at 666-67. The plaintiff's theory of the case was that the failure to timely diagnose the gall bladder condition was a contributing cause of the conditions she experienced after the surgery.

This court was concerned with the weakness of the plaintiff's evidence, noting deficiencies in the logical chain of events needed to establish but-for causation between the assumed negligence of the defendant and her alleged injury. *Id.* at 670-71. The court explained that the plaintiff's proof in that case failed because she lacked evidence that, at the time of the misdiagnosis, surgery to remove the gall bladder would have been necessary or advisable; that she would have undergone surgery earlier had it been recommended; and that the alleged delay of the surgery "resulted in harm or damage that would not have occurred if there had been no delay." *Id.* at 672-78. The portion of the *Horn* decision on which defendants here rely concerns the last of those evidentiary deficiencies. Defendants highlight this court's explanation that the plaintiff in *Horn* had to establish that her ailments would have been less severe had the surgery occurred earlier:

> "Where the alleged negligence of the defendant consisted of physical non-feasance, that is, where the defendant did no physical act which affected plaintiff's condition, and the negligence, if any, was the failure to diagnose and advise, it is not sufficient for a plaintiff to show subsequent ailments ***. One must go further and show that competent action would have been substituted for negligent inaction, and that there was a reasonable probability that the subsequent ailments would have been less if the substitution had been made.
>
> "Uncertainty as to the amount of damages will not always prevent recovery, but where the causal connection

> between the negligent failure of a defendant and subsequent ailments of a plaintiff is left to mere speculation, a nonsuit is required."

169 Or at 679. Defendants contend that, like the plaintiff in *Horn*, plaintiff in this case must show (but has failed to plead) a causal connection between defendants' conduct and his physical injuries.

In *Lippold*, the plaintiff sought treatment for an eye injury, and the defendant failed to detect a metal fragment in the eye. The plaintiff subsequently lost sight in that eye. This court explained that a plaintiff in a negligence action must prove not only negligent conduct but must also "establish by a preponderance of the evidence that such negligence was the proximate cause of the injury for which he seeks redress in damages." 126 Or at 169-70. The court noted that the plaintiff's proof was lacking. He had rested his case "without supplying any testimony as to the effect upon the eye produced by the presence of a foreign particle in its interior," *id.* at 170, and failed to establish that the removal of the metal fragment had even been possible, *id.* at 173. The defendant had adduced medical evidence that the plaintiff would have lost his sight regardless of whether the fragment had been detected and removed when the plaintiff sought treatment, and the plaintiff's expert did not contradict that evidence. *Id.* at 171-72. Thus, the evidence "gave to the jury no formula whatever by which it could determine whether the injury to the eye would eventually destroy its usefulness." *Id.* at 174.

We are not convinced by defendants' reliance on *Horn* and *Lippold*. In both cases, the plaintiffs alleged that the injuries for which they sought to recover were the health problems that they experienced after they were seen by the defendants. This court, therefore, analyzed the claims in *Horn* and *Lippold* in terms of the causal connection between the alleged negligence and the plaintiffs' later ailments or conditions. This court was not called on to decide whether the loss of a chance at a better outcome was, in itself, an actionable injury, and so *Horn* and *Lippold* do not foreclose any possibility of viewing the injury from a negligent failure to diagnose in a medical malpractice claim in terms of the loss of the chance at a better medical outcome.

E. *Should Oregon Recognize Loss of Chance in the Context of Common-Law Medical Malpractice Claims?*

Plaintiff urges that (1) loss of a chance of a better medical outcome is a discrete harm that he should be allowed to plead and prove; (2) recognizing that loss is consistent with the requirement that a plaintiff prove that the defendant's negligence was the cause in fact of the loss; and (3) the decision of the Court of Appeals runs counter to important goals of tort law. But, citing *G.L. v. Kaiser Foundation Hospitals,* 306 Or at 59, defendants argue that (1) plaintiff has not satisfied his burden to make the case for changing the legal standard required for causation—and, implicitly, that we cannot reach that issue—and (2) to recognize the loss of chance as an injury would create unworkable challenges for trial courts. Thus, the parties' arguments concerning whether Oregon should recognize loss of chance as an injury in a medical malpractice action focus on two major issues: Does *G.L.* constrain this court from considering changes to Oregon's common law of medical negligence? And, if we are not constrained, should Oregon recognize loss of chance as a cognizable injury in medical malpractice cases? We address each issue in turn and ultimately conclude that we can and should recognize loss of chance as an injury in the context of common-law medical malpractice claims.

The passage in *G.L.* on which defendants rely concerns *stare decisis.* In that passage, this court explained that, when asked to overrule common-law precedent, that is, when it "reconsiders a nonstatutory rule or doctrine," it ordinarily does that "upon one of three premises." *G.L.*, 306 Or at 59. But in this case, plaintiff is not asking us to overrule common-law precedent; rather, plaintiff contends that, in an existing common-law cause of action—medical negligence—Oregon should recognize a loss of chance as a compensable injury. Plaintiff's position is analagous to the extension of the cause of action for common-law wrongful discharge in *Brown v. Transcon Lines*, 284 Or 597, 588 P2d 1087 (1978). In *Brown*, this court expanded common-law wrongful discharge to cover retaliation against a worker for filing a workers' compensation claim, which extended the common law into a new realm of protected activity but did

not overrule precedent. Thus, we do not view either the general doctrine of *stare decisis*—the "prudential doctrine that is defined by the competing needs for stability and flexibility in Oregon law," *Farmers Ins. Co. v. Mowry*, 350 Or 686, 697-98, 261 P3d 1 (2011)—or the often-recurring reasons underlying the overruling of cases concerning the common law, as articulated in *G.L.* and *Mowry*, as an insurmountable barrier to our ability to address the case before us.

As this court stated in *Mowry*, our obligation "when formulating the common law is to reach what we determine to be the correct result in each case." 350 Or at 698. Whether an existing common-law cause of action should be extended in a new situation may involve consideration of whether a plaintiff's interests are otherwise adequately protected by the law. When, for example, existing statutory remedies "are adequate to protect both the interests of society" as well as the interests of the plaintiff, this court has found it "unnecessary to extend an additional tort remedy." *Walsh v. Consolidated Freightways*, 278 Or 347, 352, 563 P2d 1205 (1977). But this is not a case in which plaintiff is seeking an "additional" remedy when he already has one. That is, defendants do not suggest that plaintiff, or any victim of medical malpractice that results in the loss of a chance for a desirable medical outcome that is not greater than even, has any remedy at all if the common law does not provide one.

Rather, defendants' main argument against recognizing this theory of tort recovery is that it would result in too heavy a reliance on statistical evidence, which defendants describe as too speculative or subject to manipulation. That argument has also been made in other states. *See, e.g.*, *Matsuyama*, 452 Mass at 17, 890 NE2d at 833. To the extent that defendants suggest that a loss-of-chance medical malpractice claim necessarily rests on evidence that is too speculative because it involves odds that are less than even, we disagree. As the Massachusetts court explained in *Matsuyama*, '[t]he magnitude of a probability is distinct from the degree of confidence with which it can be estimated." *Id.* That is, an expert opinion that a certain treatment of a medical condition leads to a desirable medical outcome in 33 percent of cases may be based on solid, unimpeachable data, irrespective of whether that percentage is

below 51 percent. The reliability of the data does not alter the 33 percent chance, nor does the fact that the chance is only 33 percent mean that the data on which it is based is unreliable.

And, if the expert's opinion about the 33 percent chance is, in fact, incorrect, a defendant has the ability to counter it with its own expert testimony, *e.g.*, that the actual percentage is much lower, that the sources on which the plaintiff's expert relies are faulty, that the result is based on outcomes in cases that are not factually comparable to the plaintiff's case, and similar points undermining the reliability of the plaintiff's evidence. As the *Matsuyama* court noted, "at least for certain conditions, medical science has progressed to the point that physicians can gauge a patient's chances of survival to a reasonable degree of medical certainty, and indeed routinely use such statistics as tools of medicine." 452 Mass at 18, 890 NE2d at 834. We are unconvinced that the nature of the evidence involved in a loss-of-chance medical malpractice claim is so problematic as to preclude recognition of such a claim.

That brings us to the question whether we should adopt a loss-of-chance theory of injury in Oregon. We agree with plaintiff that, unlike the "reduced causation" loss-of-chance theory adopted in a handful of other jurisdictions, the causation element of a medical negligence cause of action in Oregon, *see Joshi*, 342 Or at 162 (ordinarily, the plaintiff must prove that the defendant's conduct more likely than not caused the alleged injury), can apply to the loss of chance when it is understood as an injury. In other words, when the lost chance is the injury in a medical malpractice action, the plaintiff still bears the burden to prove that, more likely than not, the defendant's negligence caused the plaintiff to lose the chance of a favorable medical outcome.

We also consider important plaintiff's argument that failing to recognize a loss-of-chance theory of injury in the context of medical malpractice has the effect of insulating from malpractice claims the negligent services that medical providers have given to those who seek treatment for conditions when their odds of a favorable medical

outcome are less than 51 percent before treatment but who can prove that they had an opportunity to realize that favorable outcome with appropriate treatment. For example, a negligent medical provider who prevents a patient from having a shot at a 45 percent chance of a favorable medical outcome need not compensate that patient at all. That patient bears the entire cost of the negligent conduct, a result that does not spread the risk of the negligent conduct to the negligent party, although "a function of the tort system is to distribute the risk of injury to or among responsible parties." *Bagley v. Mt. Bachelor, Inc.*, 356 Or 543, 551-52, 340 P3d 27 (2014) (citing W. Page Keeton, *Prosser and Keaton on the Law of Torts* § 4, 20-25 (5th ed 1984)). And, a second principle of tort law, the "'prophylactic' factor of preventing future harm," *id.* at 551, is undercut when medical providers are insulated against malpractice committed against patients when the same act (or omission) of negligence would be cognizable if committed against a patient with a better prognosis, for example, 51 percent. Taking the hypothetical of a patient with a 45 percent chance at a favorable outcome and looking at it from another angle, the all-or-nothing rule always results in negligent physicians avoiding liability and in uncompensated patients—even though in 45 out of 100 instances, the patients suffered their adverse medical outcomes because of the physician's negligence.

Moreover, as noted earlier, the physician-patient relationship is a special one in which the patient with an ailment or injury seeks to optimize the chance of recovery and the physician undertakes a duty of care, skill, and diligence to the patient. And when the physician's negligence—conduct below the standard of care—deprives a patient of the one chance that the patient had at recovery, even when that chance was not greater than a fifty-fifty proposition, considerations of fairness weigh in favor of compensation for the destruction of that chance. That is because the physician's breach of the duty to the patient results in a situation in which no one can know whether the patient would have recovered with proper medical care.

That consideration distinguishes this court's decision in *Drollinger v. Mallon*, 350 Or 652, 669, 260 P3d 482

(2011), a legal malpractice action in which the plaintiff made some "loss of chance" types of arguments. In *Drollinger*, this court declined to apply "loss of chance" in the legal malpractice context:

> "In our view, the loss of chance doctrine should not be imported into the legal malpractice context. Whatever the merits in the medical malpractice context, where the proof burden facing some plaintiffs otherwise would be insurmountable and where statistical evidence that can fill the void is readily available, the argument for its application in the legal malpractice context is less compelling, where it would simply reduce the plaintiff's burden *vis-à-vis* the traditional 'case within a case' methodology."

Id. at 669 (footnote omitted). Unlike a legal malpractice plaintiff, who has an entirely adequate way of using the "case within a case" methodology to demonstrate a better outcome, a medical malpractice plaintiff pursuing a loss-of-chance theory has lost the only chance due to the defendant's alleged negligence. Thus, the medical malpractice plaintiff asserting loss of chance is not, contrary to defendant's suggestion in the present case, in essentially the same position as a legal malpractice plaintiff.

As described earlier, numerous state courts have earlier decided the question before us, some as early as in the 1970s. There appears to be no data indicating that medical malpractice litigation has gone up or that malpractice insurance premiums have gone up because of or even in a way that is correlated with a state's decision to adopt the loss-of-chance theory of recovery in medical malpractice actions. *See generally* Koch, 88 NC L Rev at 619-26 (reviewing certain data and arguing that adoption of the loss-of-chance theory has no significant impact on numbers of actions or malpractice insurance costs). Neither defendants nor *amici* Oregon Medical Association (OMA) and American Medical Association (AMA) attempt to make the argument that adoption of the doctrine would have those kinds of effects. The OMA and AMA do assert that adoption of the doctrine will increase "defensive medicine" practice in Oregon, but they provide no analysis or data indicating that has been shown to be the case in the states that have already adopted the loss-of-chance theory.

In tandem with that assertion of adverse effects on medical practice, defendants, the OMA, and the AMA all urge that the legislature is the appropriate decision maker concerning the loss-of-chance doctrine. First, we readily reject the OMA and AMA's argument that, because the Oregon Legislative Assembly has chosen to enact some legislation addressing inappropriate medical practice, *see* ORS 677.097 (an "informed consent" requirement), we should understand, from the absence of any statute in Oregon concerning loss-of-chance, that the legislature has made a policy choice about the loss-of-chance theory that we should honor. Rather, the absence of any statute indicates that, despite being the subject of litigation in the state courts over the course of the past 40 years, the loss-of-chance theory has not been of legislative interest. *See* Koch, 88 NC L Rev at 614-17 (describing limited legislative efforts concerning the loss-of-chance doctrine despite legislative efforts targeting tort reform among the states). Second, implicit in defendants' argument are two false assumptions: (1) our rejection of the loss-of-chance doctrine would be a nondecision, reserving the issue for the legislature and (2) the inverse of that assumption—that our acceptance of the loss-of-chance doctrine would be a decision precluding legislative action. The fact is that, regardless of whether the legislature could have in the past or may in the future weigh in on this issue, this court is the forum for a case involving a common-law medical malpractice claim and that we are called on to decide common-law cases properly presented to us.

In light of all those considerations, we conclude that a limited loss-of-chance theory of recovery should be recognized in common-law negligence cases involving medical malpractice in Oregon. Because this case was dismissed at the pleading stage, it presents only a limited opportunity to discuss the various aspects of such a claim and the considerations in litigating a medical malpractice claim in which the plaintiff alleges the loss of a chance at a recovery or better medical outcome. However, we address some practical concerns that defendants and *amici* raise and provide some contours of that theory of recovery to provide guidance on remand.

First, as defendants and the OMA and AMA note, some jurisdictions that accept loss of chance as an injury require the plaintiff to establish that he or she lost a "substantial chance" of a better medical outcome due to the defendant's medical negligence. In this case, plaintiff alleges that he lost a 33 percent chance at no or limited complications from his stroke because of defendants' negligence. Although there are numerous reasons why the courts in those other jurisdictions have required the loss of a "substantial chance," we need not decide that issue in this case, because we conclude as a matter of law that, whether required or not, plaintiff has alleged the loss of a substantial chance by alleging a 33 percent chance of total or close to total recovery from his stroke had defendants provided him with non-negligent care.

Second, as defendants argue, fairness to defendants requires that plaintiff plead with specificity the lost chance of a better medical outcome. In practical terms, a plaintiff must plead the percentage and quality of his or her loss of chance, which in turn must be based on the plaintiff's experts and relevant scientific evidence that meets the standard of reasonable medical probability. Plaintiff's allegation in this case is sufficient to meet the pleading requirement.[5]

Third, as his complaint reflects, plaintiff has suffered the physical harm that he might well have avoided had he received proper medical care. That present adverse medical outcome is an essential element of a common-law medical malpractice claim and provides the foundation for a calculation of plaintiff's damages. Most jurisdictions that have recognized loss of chance as a theory of injury in medical malpractice cases have an approach akin to that suggested by Professor King in the 1981 law review article cited above. That is, to paraphrase it, a plaintiff who demonstrates that a physician's negligence reduced his chance of a

[5] We note that this case involves a "loss of chance as injury" claim because plaintiff was unable to allege that he had at least a 51 percent chance of recovery but for defendants' malpractice. Had he been able to make that allegation, he would have had the ability to prove a standard medical malpractice claim based on the ultimate poor medical outcome as the injury. In other words, that kind of allegation involves proof of the medical outcome as the injury and not the lost chance as the injury.

favorable medical outcome from 33 percent to zero percent could recover damages based on the unfavorable medical consequences suffered, but only to the possible extent of 33 percent of the damages resulting from the adverse medical outcome. *See, e.g.*, King, 90 Yale LJ at 1363-64.

Professor King cited this court's decision in *Feist v. Sears, Roebuck & Co.*, 267 Or 402, 517 P2d 675 (1973), as consistent with that approach, and we agree. In *Feist*, which was not a medical malpractice case, there was no dispute that the defendant's negligence caused a cash register to fall onto a child's head, fracturing her skull and tearing the skull's lining. *Id.* at 403-04. The plaintiff's expert testified that, to a reasonable degree of medical certainty, the child was susceptible to meningitis as a result of the injuries to her skull, although her chance of developing meningitis was low, and one of the questions on appeal was the permissibility of an instruction allowing the jury to award damages for that increased susceptibility. *Id.* at 410. This court explained that, when there is evidence of an injury and a susceptibility to the development of complications from that injury in the future, such evidence "is sufficient as the basis for a finding by the jury of some disability" and that the jury can "make a larger award of damages" than in a case that does not involve that type of "danger, risk, or susceptibility." *Id.* at 412. Although this court did not suggest a specific mathematical formula by which damages were to be ascertained, it clearly indicated that a jury should be guided in its award of damages by its assessment of the likelihood that the defendant's negligence led to (or would lead to) the medical sequelae of the negligence. 267 Or at 410-12.

In addition, it is implicit from this court's decision in *Coffey v. Northwestern Hospital Association*, 96 Or 100, 183 P 762, *on reh'g*, 96 Or 113, 115-16, 189 P 407 (1920), and more explicit from this court's decision in *Curtis v. MRI Imaging Services II*, 327 Or 9, 956 P2d 960 (1988), that distress—both physical and emotional—directly and foreseeably attributable to negligence involving diagnosis and treatment of a patient is recoverable under a loss-of-chance theory. In *Coffey*, this court held that the plaintiff was entitled to seek recovery of her damages for both mental and physical pain and suffering she experienced due to the defendant's failure

to promptly provide surgical services. 96 Or at 115-18. *See also Curtis*, 327 Or at 15 (permitting the plaintiff to recover for psychological harm). Accordingly, plaintiff may recover for both physical and emotional damages.

IV. CONCLUSION

Although this court has not previously recognized loss of chance as a theory of recovery in a negligence case, we conclude that a loss of a substantial chance of a better medical outcome can be a cognizable injury in a common-law claim of medical malpractice in Oregon. Accordingly, we conclude that the trial court erred in dismissing plaintiff's claim.

The decision of the Court of Appeals is reversed. The judgment of the circuit court is reversed, and the case is remanded to the circuit court for further proceedings.